TOULMIN'S FIELD-DEPENDENCY THESIS AND RELATIVISM

TOULMIN'S FIELD-DEPENDENCY THESIS AND THE THREAT OF RELATIVISM

By ANDREW PINEAU, B.A.

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AUTHOR: Andrew Pineau, B.A. (Hons.) (McMaster University)

SUPERVISOR: Professor D.L. Hitchcock

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ABSTRACT

In this thesis I deal with the issue of relativism that threatens Toulmin's field-dependency thesis (i.e. the claim that the standards of argument appraisal depend on the argument field in which the argument occurs). After offering partial interpretation of the concept of "argument fields" and elucidating the concept of field-dependence, I argue that Toulmin's field-dependency thesis does result in an unacceptably strong relativism.

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The first casualty of thesis writing is sanity. I have learned this is especially true when you are writing about the theories of Stephen Toulmin, whose body of work amounts to an interpretive labyrinth full of riddles and dead ends. So it has helped to have the encouragement and assistance of others on this perilous journey, all of whom I would like to sincerely thank.

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INTRODUCTION

Can we go about evaluating an argument at a physics symposium regarding the nature of black holes in the same way we would evaluate an argument defending the unconstitutionality of the death penalty at the Supreme Court of Canada? Similarly, can we evaluate Aquinas' arguments for the existence of God by the same standards by which we would evaluate Cantor's diagonalization argument? These are the types of questions that Stephen Toulmin is concerned with in *The Uses of Argument* (1958). After noticing the diversity of justificatory arguments, Toulmin (1958) wonders "how far they can all be assessed by the same procedure, in the same sort of terms and by appeal to the same sort of standards" (p. 14) While formal logicians have tried to create a universal system of argument analysis, Toulmin's inquiry leads him to conclude, much to the dismay of formal logicians, that there are some irreducible differences between different arguments that impede the pursuit of a universal system of logic. Toulmin concludes that the standards of argument evaluation are 'field-dependent', meaning that we should evaluate an argument by the standard of its field. As Verheij (2005) points out, "[t]his raises a fundamental and a practical question. The fundamental question is what remains of logic when the rules of argument are variable" (p. 368). Toulmin's theory, which encourages us to evaluate arguments with an eye to context, essentially calls into question the adequacy and practical value of the bulk of formal logicians' work.

As such, Toulmin's field-dependency thesis has been controversial and it should come as no surprise that it has been criticized on the grounds of being relativistic. Once we admit that the standards of argument evaluation can vary, we tread dangerously close

to a pernicious, self-defeating relativism. The charge of relativism has been leveled most notably by writers such as Schroeder (1997), Freeman (2006) and Godden (2009). The main objective of this dissertation is to examine and evaluate the most threatening charges of relativism against Toulmin's field-dependency thesis. I conclude that Toulmin's field-dependency thesis does entail an unacceptable relativism.

In the first chapter I provide a brief overview of Toulmin's theory of argument as he presents it in *The Uses of Argument*. The second chapter deals with Toulmin's concept of 'argument fields'. After surveying some of the more prominent theories and interpretations of argument fields and showing how they do not correspond well with Toulmin's conception, I determine that Toulmin's concept of an argument field is far too obscure to arrive at a complete account. However, I do conclude that disciplines are a type of argument field. In the third chapter, the focus is on Toulmin's field-dependency thesis, including identifying those aspects of argument that Toulmin takes to be field-dependent and what it is for something to be field-dependent. I argue that each component of Toulmin's layout of argument is field-dependent, meaning that its appropriateness, relevance, acceptability, etc. is determined by the field. I also argue that the field-dependence of the warrant entails that fields provide the standards of argument appraisal and also that Toulmin's field-dependency thesis has a temporal component. In the fourth and final chapter, I survey the major charges of relativism as well as some possible solutions to the problem. After considering all of these points I conclude that Toulmin's field-dependency thesis does entail a pernicious relativism.

CHAPTER 1: AN INTRODUCTION TO TOULMIN'S THEORY OF ARGUMENT EVALUATION

1.1 Argument Fields and Field-dependency

Toulmin's concept of argument fields was first introduced in *The Uses of Argument* (1958), a book comprised of five interrelated critical essays on the state of logical theory. Toulmin laments that there has been a stark divergence between the study of logic and the actual practice and assessment of arguments. This divergence is largely due to the logician's pursuit of a universal (or "field-invariant") logic in the fashion of a rigorous formal system modeled on mathematics. While this mathematical model provides us with a very 'clear' and 'elegant' form, Toulmin (1958) believes it involves no substantial inferential steps (p. 127). As a result, Toulmin (1958) asserts that "mathematical logic has become a frozen calculus, having no functional connection with the canons for assessing the strength and cogency of arguments" (p. 186). In response, he puts forward a 'rival' understanding of argument assessment, one whose categories and procedures are based on jurisprudence rather than mathematics. With jurisprudence as his model, Toulmin sets out to 'characterize the rational process' of arguing for claims while explaining how the logician's goal of a universal logic is misguided. Crucial to Toulmin's project is the notion of 'argument fields' and identifying the aspects of arguments that remain invariant between fields and those aspects that do not.

In the first essay of *The Uses of Argument* (1958), Toulmin draws our attention to the extensive diversity of justificatory arguments, those arguments put forth to defend

assertions. When considering how to produce an argument to defend an assertion or how to criticize or assess such an argument, Toulmin (1958) believes, one should be struck by

> the great range of assertions for which backing can be produced, the many different sorts of thing which can be produced as backing for assertions, and accordingly, the variety of steps from the data to conclusions which may appear in the course of justificatory arguments (p. 12).

One can assert a mathematical theorem, the date of the next eclipse or the innocence of a defendant on trial for murder. In each case, the kinds of backing and argument one will produce to support one's claim will differ significantly according to the nature of the problems faced (Toulmin, 1958, pp. 12-3). This diversity, Toulmin maintains, leads to a major problem when it comes to the evaluation of arguments; it is unclear how often and in what ways we can expect the procedures of argument evaluation to differ from one argument to the next. As Toulmin (1958) explains, "[t]he justificatory arguments we produce may be of many different kinds, and the question at once arises, how far they can all be assessed by the same procedure, in the same sort of terms and by appeal to the same sort of standards" (p. 14). To what degree can an argument for the existence of dark energy, for instance, be evaluated in the same way as an argument for the moral permissibility of abortion? And how similar would those evaluations be to that of an argument for the unconstitutionality of capital punishment?

To help find answers to such questions, Toulmin introduces the notion of a '*field* of arguments' (p. 14, italics in original). Different types of argument, he says, will be said to belong to different fields. For example, a geometrical proof belongs to a certain field, an argument for the unconstitutionality of capital punishment might belong to a different field, and an argument for existence of dark matter could belong to yet another field. This, however, raises the further question of how to delineate fields, something Toulmin

explains rather vaguely. At first, he differentiates fields by what he calls 'logical types', a concept he also leaves largely unexplained. "Two arguments will be said to belong to the same field," Toulmin (1958) explains, "when the data and conclusions in each of the two arguments are of the same logical type" (p. 14). Conversely, two arguments "will be said to come from different fields when the backing or conclusion of each of the two arguments are not of the same logical type" (Toulmin, 1958, p. 14). However, in other places, he demarcates fields by disciplines (e.g. law, astronomy, aesthetics); throughout the work he talks of "moral, mathematical or psychological fields" (Toulmin, 1958, p. 104). In other places he claims that fields can be differentiated by the different sorts of problems they address (Toulmin, 1958, p. 167). Thus, the central notion of an argument field is left rather ambiguous. One of our tasks in this essay will be to clarify what Toulmin intended by this concept, because his conception of fields often underlies charges of relativism.

With the notion of an 'argument field' used to categorize and organize the diverse range of arguments, Toulmin (1958) recasts the above problem regarding the analysis and evaluation of arguments by asking the following question: "What things about the form and merits of our arguments are *field-invariant* and what things about them are *field-dependent*?" (p. 15). In other words, what about arguments will remain the same in all fields and what things differ between fields? How similar will the applicable standards for assessing arguments in aesthetics be to the standards for assessing a mathematical proof? Toulmin (1958) determines that, much as in jurisprudence, the sorts of evidence relevant in cases of different kinds will vary significantly (p. 16). For example, one would not cite

a biological fact to argue for a mathematical theorem. On the other hand, certain procedural and formal aspects of justificatory arguments (which we will see in the next section on the layout of argument) remain largely invariant across different fields (Toulmin, 1958, p. 22). However, what is most important for our purposes is what he has to say about the evaluation of arguments with respect to fields. Toulmin (1958) contends that "all the *canons* for the criticism and assessment of arguments… are in practice field-dependent, while all our terms of assessment are field-invariant in their force" (p. 38). This is to say that, while we can analyze an argument into its component parts regardless of the field, the evaluation of any argument depends on the standards of the field in which it occurs. An argument for the existence of dark matter at an astrophysics colloquium cannot be evaluated by the same standards as a lawyer's argument for the innocence of a defendant on trial for murder. Each would be evaluated according to the relevant standards in their respective fields (i.e. astrophysics and law). As Toulmin (1958) elaborates,

> Arguments within any field can be judged by standards appropriate within that field, and some will fall short; but it must be expected that the standards will be field-dependent, and that the merits to be demanded of an argument in one field will be found to be absent from entirely meritorious arguments in another (p. 255).

It is inappropriate to apply standards from one field to the arguments of another and this, according to Toulmin, is a major way in which logic is misguided. Logic, he believes, has treated the rigorous criteria of what he calls 'analytic arguments'[1] as the universal standard of evaluation, applying it to arguments from various other fields whose

[1] Recently, Hamby (2010) has argued that Toulmin's concept of an analytic argument is unclear. Unfortunately I will not be able to address this critique within the span of this essay, but I am inclined to agree with him.

arguments involve more substantial inferences and finding them deficient (Toulmin, 1958, p. 255). Thus, many arguments are being evaluated against "irrelevant canons of judgment" and arguments in various fields are "being condemned for failing to achieve something which it is no business of theirs to achieve" (Toulmin, 1958, p. 257). In doing so, the traditional account of logic obscures the differences between fields and the sorts of things appropriate to each (Toulmin, 1958, p. 143). And Toulmin believes we should not try to overcome these differences by attempting to create an entirely field-invariant logic. "Since we are unable to prevent life from posing us problems of … different kinds," he affirms, "there is one sense in which the differences between different fields of argument are of course irreducible – something with which we must just come to terms" (Toulmin, 1958, p.167). The field-dependent aspect of logic is an essential feature, arising from the irreducible differences between sorts of problems with which arguments are designed to deal (Toulmin, 1958, p. 176). Rational judgment occurs within certain contexts and arguments must always be assessed with an eye to this context (Toulmin, 1958, p. 183). Otherwise, logic ignores the practical problems out of which argument arises and it loses applicability (Toulmin, 1958, p. 185).

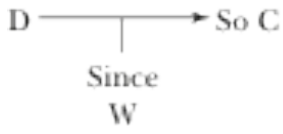
The question remains, what exactly are these 'canons' for the criticism and assessment of argument that Toulmin claims to be field-dependent? To get a better idea we must look to Toulmin's layout of argument that he introduces in the third essay of *The Uses of Argument*.

1.2 Toulmin's Model of Argument

Toulmin introduces a layout of argument that is more complex and 'candid' than the traditional, overly simplistic premise/conclusion layout of syllogistic arguments. Still working under a jurisprudential model, he believes we need a more complex set of categories to correspond with the vast array of different types of 'legal utterances' each having its own 'distinct function' (Toulmin, 1958, p. 96).

We begin with the first category, a *claim* that, if challenged, we will need to establish. If a challenger asks 'What have you got to go on?" in response to the claim, we could present our *data*, "the facts we appeal to as a foundation for our claim" (Toulmin, 1958, p. 97). A challenger could then ask a different type of question, "How do you get there?". This is a request for the "bearing of the data" on the claim rather than "more factual information" (Toulmin, 1958, p. 98). In other words, what is being asked for is an 'inference-license' that shows that the step from the data to the claim was legitimate. These inference-licenses will take the form of hypothetical statements that authorize the move from data to claim. Such statements are called *warrants*. "[Warrants] may normally be written very briefly (in the form 'If D, then C')," explains Toulmin (1958), "but for candour's sake, they can profitably be expanded, and made more explicit: 'Data such as D entitle one to draw conclusions, or make claims, such as C'…" (p. 98). Warrants, unlike data, tend to be relied on implicitly and they are established differently from data since they are "general, certifying the soundness of *all* arguments of the appropriate type" (Toulmin, 1958, p. 100, italics in original). Toulmin (1958) diagrams these three components as follows:

FIG 1

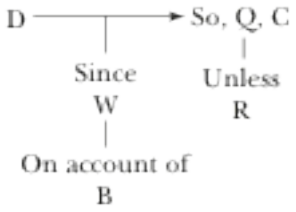


(p. 99)

Regardless of the field, Toulmin (1958) claims, one can lay out an argument in this form (p. 175). Thus, this form of argument can be said to be field-invariant. However, there are additional categories that Toulmin identifies which may be required in certain cases and which add more complexity to this layout.

The remaining categories are the *qualifier*, *rebuttal*, and *backing*. The qualifier indicates the strength that the data confer on the claim given the warrant. For example, we may need to qualify our claim with unequivocal terms such as 'necessarily' or more guarded terms like 'probably'. Closely related to the qualifier is the rebuttal which specifies the exceptional circumstances, if any, in which the warrant loses its authority (Toulmin, 1958, p. 101). What remains is the backing, which corresponds to another type of question a challenger could ask, this one about the warrant. After presenting a warrant, a challenger may ask "But why do you think that?". In response to this we would provide information which functions to give the warrant authority. Much like the warrant, the backing is also usually implicit (Toulmin, 1958, p. 103-4). The remaining components are added to the above diagram as follows:

FIG 2



(p. 104)

This layout has since been dubbed the 'Toulmin model of argument'.

1.3 The Canons for Argument Assessment: Warrants and their Backing

For the purposes of this essay, the components with which we will be most concerned are the data, claim, warrant and backing, but especially the warrant. According to Toulmin (1958) warrants "correspond to the practical standards or canons of argument…"(p. 98). Thus, an argument's warrant will be field-dependent. It's important to note however, that the 'force' of the warrant remains invariant across all fields: it always functions as an inference-license employed to legitimize the move from the data to the claim (Toulmin, 1958, p. 129). The acceptability of warrant used in an argument, though, will depend on the field to which that argument belongs. Similarly, Toulmin maintains that the backing is also field-dependent. "[T]he actual sort of facts," he explains (1958), "in virtue of which any warrant will have currency and authority will vary according to the field of argument within which that warrant operates" (p. 112). Thus, warrants, the canons of argument assessment, and backing, which gives the warrant authority, are *both* field-dependent.

Despite the fact that backings give warrants their authority, Toulmin believes that some warrants must be accepted, at least provisionally, without question. That is to say that there will be some cases where it is inappropriate for a challenger to demand the

backing for a warrant. This is why backings are not part of the form common to all arguments. The data one provides in response to a challenge to one's claim, says Toulmin (1958), depend on the warrants one is willing to work with in a field. Without any accepted warrants, it could not be known what data are relevant to what claim (p. 106). "If we demanded the credentials of all warrants at sight and never let one pass unchallenged," Toulmin believes, "argument could scarcely begin" (p. 106). On a similar note, he affirms that "unless, in any particular field of argument, we are prepared to work with warrants of *some* kind, it will be impossible in that field to subject arguments to rational criticism" (Toulmin, 1958, p.100) and rational discussion could not occur (Toulmin, 1958, p. 175). Thus, warrants hold a special place in argumentation, according to Toulmin, and will require close attention when we come to the issue of relativism.

Argument fields and identifying field-dependent aspects of arguments play a crucial role in how Toulmin believes we should understand the rational process of justifying claims. He believes that claims and the arguments put forth to defend them occur within a context and proper attention must be paid to this fact when evaluating arguments. While I have thus far focused on how Toulmin explained these concepts in *The Uses of Argument* (1958), these ideas turn up in some of his later works such as *Human Understanding* (1972), a book on how conceptual change within a science can be rational, and *An Introduction to Reasoning* (1978/1984), a critical thinking textbook he coauthored. In the following chapters we will turn to these other relevant texts to help clarify the concepts of argument fields and field-dependency before turning to the question of relativism.

CHAPTER 2: TOULMIN'S ARGUMENT FIELDS

At the heart of virtually all charges of relativism made against Toulmin's theory of argument lies a certain understanding of argument fields and field-dependency. Thus, it will be important for us to determine what Toulmin intended with these notions before we can evaluate the critiques and defences of Toulmin's field-dependency thesis. The aim of these next two chapters is to clarify these contentious ideas. The arguments and interpretations I present within these two chapters will provide the groundwork for the final chapter where I present my arguments regarding the purported relativism that Toulmin's field-dependency thesis has been charged with. In the present chapter, I will explore the notion of argument fields in order to determine what Toulmin intended by this key concept.

2.1 Theories of Fields

Since Toulmin introduced the term "argument field" in *The Uses of Argument*, it has spawned extensive discussion and debate, largely within the discipline of speech communication, regarding the nature of argument fields. While some theorists have attempted to clarify Toulmin's understanding of argument fields, many others have argued for radically different conceptions of argument fields. For instance, Klumpp (1981) identifies fields with types of situational communication which are delimited by the commonality of argument characteristics (p. 46, 48). Kneupper (1981) consider fields to be "knowledge structures and contexts for reasoning" (p. 81). Gronbeck (1981) believes that argument fields are "collections of communicative rules which specify what may be disputed by whom, when, how, where, and to what end " (p. 15). Drawing

inspiration from Toulmin's *Human Understanding*, Rowland (1981) believes that, while fields can have other important features, the ultimate and essential feature of every field is the shared purpose of a group of persons facing a problem (p. 61, 75). McKerrow (1980b) believes fields derive their stability from language (p. 402). Willard (1982) defines fields as sociological entities and psychological perspectives that are brought to life by the practices of people (p. 46). Wenzel (1982) characterizes fields as "the propositional content of a disciplined, rational enterprise with an epistemic purpose". Evidently, there is a diverse range of views on how to conceive of argument fields. As Willard (1992) has noted, the notion of argument fields is so unclear that it can be used in entirely incompatible ways and "can be made to say virtually anything" (p. 437). Whether or not this is a good thing is debatable, but it has been cause for much discussion about the usefulness of dividing and analysing arguments in terms of argument fields.

While talk of fields has tapered off over the years (Godden 2003, Rowland 2008), it still remains unclear what Toulmin himself intended by the term "argument fields". As we already saw, in *The Uses of Argument* (1958) Toulmin leaves the notion of an argument field rather ambiguous. The ultimate aim of this chapter will be to clarify what Toulmin meant by the term "argument field". To do so, we will look at some of the above theories to see how well they fit with Toulmin's conception of fields. Ultimately, it will be shown that Toulmin's concept of argument fields is far too unclear to be able to arrive at a comprehensive account. However, I do conclude that we can, at the very least, conclude that disciplines are a type of argument field.

2.2 Argument Fields as Disciplines

Many field theories lean toward the idea that argument fields are to be delineated by or identified with different academic disciplines and delineated by disciplinary boundaries (for example, see Klumpp 1981, Kneupper 1981 and Wenzel 1982). This is also the view that many have attributed to Toulmin himself (for example, see Goodnight, 1982, p. 223; Rowland, 1982, pp. 229-30; Willard, 1981, p. 130). However, it is not true that Toulmin equated argument fields with different disciplines. While one can conclude that Toulmin believed that some fields are disciplinary in nature, he nowhere indicates that all fields are disciplines. In fact, much of what he says tells against a strictly disciplinary conception of fields.

In the first chapter of *The Uses of Argument*, Toulmin gives examples of arguments that would belong to different fields. While many may seem disciplinary in nature, there is one example that is clearly not. As Toulmin (1958) explains, "[t]he argument 'Harry's hair is not black, since I know for a fact that it is red', belongs to a…rather special field" (p. 14). This example of an argument belonging to a certain 'special' field should be immediate cause for doubting the idea that Toulmin equates argument fields with disciplines, since there is no discipline to which arguments about hair colour belong exclusively[2].

Why, then, do people continue to believe Toulmin identified argument fields with disciplines? I believe there are three major reasons. The first is that he uses the term "field" in reference to certain disciplines numerous times throughout *The Uses of*

[2] I later found out that Hanson (1989) also makes a similar argument (p. 276).

Argument. For example, Toulmin (1958) mentions "moral, mathematical or psychological fields" (p. 104). He also speaks of such fields as "(philosophical) ethics" (p. 116, p. 142), "physics", "logic" (p. 209), "probability" (p. 93), "jurisprudence" (p. 9), "geometry" (p. 178), as well as "arithmetical" and "astronomical" fields (p. 241). However, all we can rightly determine from this is that disciplines are a type of argument field. Since Toulmin never explicitly says it, we cannot conclude that argument fields are equivalent to disciplines.

The second major reason that people believe Toulmin equated argument fields with disciplines is his use of the term "field" in *Human Understanding*, which details the evolution of concepts within rational enterprises. Here, unlike with *The Uses of Argument*, Toulmin uses the word "field" *only* with respect to disciplines. For example, Toulmin states, "[s]electing from a great variety of possible fields, let us consider examples taken from law, physics and anthropology" (p. 86). Willard (1981) considers Toulmin's treatment of fields as disciplines in *Human Understanding* to be a reformed view of fields (p. 130), as does Rowland (1982, p. 229-30). However, this is not justified. While Toulmin uses the word "field" with respect to disciplines in *Human Understanding* (see pp. 86, 91, 167, 226, 365, and 387), he nowhere implies that all fields are disciplines or equates fields with disciplines. He merely believes that some disciplines or 'rational enterprises' are fields. And while it is true that the word "field" is *only* used with respect to disciplines in *Human Understanding*, this is merely because *Human Understanding* is concerned with the rationality of conceptual change within disciplines. This does not necessarily mean that Toulmin considered all fields to be disciplines.

The third and final major reason for concluding that Toulmin believed that argument fields were to be equated with disciplines is the treatment of fields in *An Introduction to Reasoning* (1984), which he co-authored with Rieke and Janik. In this critical thinking textbook, we get a further elaboration and development as well as an application of Toulmin's theory of argument as it appeared in *The Uses of Argument*. In the final section of *An Introduction to Reasoning*, Toulmin, Rieke and Janik dedicate a significant amount of space to analyzing five 'special fields of reasoning': law, science, aesthetics, business and ethics, all of which seem disciplinary in some way. However, as was the case with *The Uses of Argument* and *Human Understanding*, fields are never identified with disciplines here. Disciplines are merely pointed to as instances of fields. Additionally, they acknowledge both "technical and nontechnical areas of discussion" (*ibid*. p. 241). They specify some types of arguments and give some examples of arguments throughout that do not belong to any one specific discipline. For example, they identify sports arguments involving the prediction of the winning team (*ibid*., p. 254). These facts all point towards a theory of argument fields that is not exclusively disciplinary.

The most salient evidence we can find in *An Introduction to Reasoning* that shows Toulmin does not equate fields with disciplines is a short section on common sense. Here, it is explained how effective reasoning and argumentation are not restricted to 'specialized and technical fields' and qualified professionals (Toulmin, Rieke & Janik, 1984, p. 118). Besides technical and disciplinary fields, Toulmin, Rieke and Janik (1984) also identify "broad fields of experience in which we all stand on the same footing, and in

which we can all reason in the same ways and to the same effect" (p. 118). Though Toulmin does not give these fields a name, we can call them "non-technical fields" for now. "In the affairs of everyday life", they say, "we rely on a commonly shared body of understanding about how we shall act in various familiar situations…and how seriously are words are to be taken…" (*Ibid*., p. 118) and have "a general grasp of 'the way things happen'" (p. 119). In addition to this brief characterization of these fields, Toulmin, Rieke and Janik (1984) say that they form the foundation for more specialized and technical fields that eventually branch off (p. 119). Thus, it should be clear that Toulmin does not take argument fields to be synonymous with disciplines, since he and his co-authors identify these non-technical fields in addition to the disciplinary fields.

Why then, it may be asked, does Toulmin focus so much time on disciplinary fields and say very little about non-disciplinary fields? Indeed, the vast majority of field discussion that goes on in Toulmin's works focuses only on disciplinary fields. There are numerous possible explanations for this focus, but I think the best is that disciplinary fields provide the best illustrative examples of fields. Non-disciplinary fields are likely not as easily identified and so the analysis of arguments belonging to such fields is not as clear. In the section of *An Introduction to Reasoning* dealing with warrants, Toulmin, Rieke and Janik (1984) state that professional fields of argument such as natural science and law provide us with the most "reliable and exact" cases of warrants (p. 50). While this passage concerns only warrants, I think it is safe to assume that it would generally be true for the study of arguments and argument fields. Thus, we have good reason to believe that disciplines are the focus, not because all fields are disciplines, but because

disciplines are the most easily identified fields and provide us with the best illustrative examples when it comes to studying arguments and argument fields. But, while Toulmin's primary focus is on disciplines, we should not neglect the fact that Toulmin does acknowledge non-disciplinary fields.

Given the above findings, we should reject the idea that Toulmin equated argument fields with disciplines. While Toulmin does identify some disciplines as argument fields, he also acknowledges non-disciplinary argument fields as well as argument fields that span multiple disciplines. The question then remains: how are we to distinguish or identify fields that are non-disciplinary? We know that Toulmin thought that some fields are disciplines, but the ultimate nature of fields still eludes us. To attempt to get a better understanding of Toulmin's argument fields we might find it useful to turn to his oft-neglected notion of logical types.

2.3 Argument Fields and Logical Types

Toulmin's most explicit and forthright explanation of fields is probably the most disregarded aspect of his conception of fields. As we already saw, Toulmin (1958) explains that "[t]wo arguments will be said to belong to the same field when the data and conclusions in each of the two arguments are of the same logical type: they will be said to come from different fields when the backing or conclusion of each of the two arguments are not of the same logical type" (Toulmin, 1958, p. 14). Despite this being the most forthright characterization of Toulmin's distinction between fields, very few who study argument fields employ the concept of logical types at all when it comes to understanding fields, and most have seemed to abandon it. There are two major reasons for this: the first,

which we have already noted, is the apparent obscurity of the term 'logical types'. As Willard (1992) notes, Toulmin never specifies what theory of logical types he had in mind (p. 451). The second is Willard's (1981) influential criticism of the use of logical types to demarcate fields.

In his critique, Willard (1981) rejects the idea of demarcating fields by different logical types. He takes logical types to be merely formal in nature, and so he says that dividing fields by logical types makes field theory tantamount to the study of language and logic while "communities of discourse become epiphenomena of linguistic categories" (p. 137). The consequence of delimiting fields by logical types, he says, is the loss of the context-embeddedness of arguments (*ibid.*). Thus, Willard concludes, logical types are not a good way to define argument fields.

Willard's critique is uncharitable, though, in that it construes Toulmin's logical types as sorts of merely formal or syntactical distinctions[3]. He attempts to determine what Toulmin meant by the term by tracing the history of the usage of the term "logical type" (e.g. Russell's theory of logical types). But, as Hanson (1989) argues, such conceptions of logical types are exactly the kind of thing Toulmin was arguing against (p. 278). While Toulmin does not give us a theory of logical types, to interpret the term "logical types" as indicating merely formal or syntactic distinctions is highly uncharitable, given how Toulmin stresses the importance of context. Willard's critique of the use of logical types

[3] And he is not the only one to do so; Zarefsky (1982) thinks that, in *The Uses of Argument*, Toulmin seemed to support the distinction of fields by formal differences in their arguments (pp. 421-2).

to demarcate fields may be effective against merely formal or syntactic conceptions of logical types, but Toulmin most likely did not intend to use the term in this way[4].

It is easy to see how one might interpret logical types as Willard does, especially if one is familiar with modern logic, since the mainstream method of analysis in the discipline of logic is dominated by the examination of formal relations among propositions. However, Toulmin, as we have seen, expresses dissatisfaction with this method of argument analysis and would not likely adopt it or a similar method for delimiting argument fields. A way in which we might avoid associating Toulmin's logical types with the logical types studied in modern logic is by thinking of his notion as synonymous with "reasoning types" or "types of reasons". This way we avoid formal logical jargon and the tendency to narrowly interpret Toulmin's notion in formal logical terms. While this does not offer much insight into what logical types actually are, it is useful to avoid misinterpreting Toulmin.

If not merely formally or merely syntactically, how, then, are we to characterize Toulmin's logical types? While many disregard the notion, some have recognized its importance, and from their works we may be able to gain some insight. Two prominent field theorists who acknowledge the significance of Toulmin's concept of logical types when it comes to understanding argument fields are McKerrow (1980b) and Hanson (1989). McKerrow (1980b) believes that Toulmin's concept of fields will become clear when we have a clear conception of logical types (p. 408). Further, he believes that the term 'field' has been misused by ignoring "logical type context" and by applying it to

[4] See Hanson (1989) for a more detailed argument on this matter (pp. 278-80).

disciplines and subject matters (McKerrow, 1980b, p. 403). He also points out that Toulmin borrows the term "logical types" from Gilbert Ryle, namely from his lecture entitled "Philosophical Arguments" (p. 402). However, McKerrow does not offer a detailed explanation of the term 'logical type' and goes on to describe a linguistic account of fields, claiming that fields derive their stability from language (McKerrow, 1980b, p. 402). Further, while Ryle was a significant influence on Toulmin[5], and some of the ideas in Ryle's lecture are echoed in Toulmin's work[6], Ryle does not provide a comprehensive theory of logical types and so does not provide much insight into what Toulmin meant.

A more thorough account is given in Hanson (1989), who makes a valiant attempt at salvaging the concept of logical types. He argues that Toulmin distinguishes between 'fields' and 'argument fields' (p. 275). "A field", Hanson (1989) explains, "is a discipline or ongoing forum, it is a body of people organized and functioning for a specific purpose", whereas "a field of argument is an argument backing system where arguments are justified with the same kind of support" (p. 275-6). The former are defined by " the characteristics of an intellectual discipline or a forum of argument", while the latter are defined by "logical types" which, according to Hanson (1989), are "an agreement among those participating in a dispute that certain kinds of data will justify certain kinds of conclusions" (p. 276). In contrast to what Willard (1981) maintained, Hanson (1989) believes that the concept of logical types always involves the use of some context-embedded concepts (p. 277). On his understanding, two arguments will be of the same

[5] For example, Toulmin (1958) borrows the notion of an inference-license from Ryle for his concept of a warrant (p. 260).
[6] For example, Ryle (1971) talks about disciplines applying their own "canons of inquiry" (p. 194) and about the contextually varying logical force of certain expressions (p. 204).

logical type if they use the same context-embedded concepts (Hanson, 1989, p. 278). Fields of argument can occur outside of a discipline or within a discipline and, while fields (i.e. disciplines, forums etc.) are not identical to argument fields, they do play an important role in shaping and contributing to such characteristics of certain argument fields as the degree of formalism and the goals (pp. 276-7).

There is much to be gained from Hanson's interpretation. He recognizes the fact that Toulmin's argument fields can be non-disciplinary and that they can cover multiple disciplines. He also recognizes that logical types need not be merely formal logical types. His contextual characterization of logical types is truer to Toulmin's intent than Willard's interpretation. Nevertheless, Hanson's account faces some major interpretive problems.

One problem is Hanson's assertion that Toulmin distinguishes between "fields" and "argument fields". This, I believe, is highly doubtful. Within *The Uses of Argument* Toulmin appears to use the two words interchangeably. We have seen already that Toulmin uses the word "field" to speak of disciplines, but he also uses it with reference to argument fields in general. For example, Toulmin (1958) explains that

> [w]hat has to be recognised first is that validity is an intra-field, not an inter-field notion. Arguments within any field can be judged by standards appropriate within that field, and some will fall short; but it must be expected that the standards will be field-dependent, and that the merits to be demanded of an argument in one field will be found to be absent (in the nature of things) from entirely meritorious arguments in another" (255).

Here, Toulmin is clearly using the word "field" interchangeably with "argument field". Further, Toulmin speaks of "field-dependence" and of "field-invariance" (Toulmin, 1958, p. 15), not "argument field-dependence" and "argument field-invariance". And often Toulmin will quickly switch between using the word "field" and "argument field". For instance, Toulmin (1958) says that

> [t]he moment we start asking about the backing which a warrant relies on in each field, great differences begin to appear: the kind of backing we must point to if we are to establish its authority will change greatly as we move from one field of argument to another (p. 104).

Thus, it is highly doubtful that Toulmin distinguished between fields and argument fields as Hanson argues.

Yet, even if we admit that Toulmin distinguishes between fields and fields of argument, we would have to believe that Toulmin believed that some fields were also argument fields, which I am not sure Hanson would accept. Hanson (1989) believes that fields (i.e. disciplines, forums, etc.) can span many different argument fields and that argument fields can occur entirely within a field, but he seems reluctant to identify any fields with fields of argument. Hanson (1989) admits that "[t]he field in which the argument occurs does create characteristics important to the argument field, including, as we have noted, the formality, precision, goals, and mode of resolution of an argument" (p. 277). However, he says that these characteristics do not constitute the elements of a field of argument. "The defining factor of an argument field is *the difference in the way the arguments are justified*" (*ibid*.). But Toulmin does believe that some disciplines are argument fields (as we saw in 2.2). Thus, if we accept Hanson's interpretation that Toulmin distinguishes between "fields" and "fields of argument", there will be some overlap between his concept of a field and his concept of an argument field. That is to say, some disciplinary bodies of people organized and functioning for a specific purpose would also be argument backing systems where arguments are justified with the same kind of support. However, this interpretive flaw is not fatal, because I do not see any reason why Hanson's interpretation could not be altered to accommodate it.

A more pressing concern has to do with Hanson's definition of "logical types". Hanson characterizes logical types as agreements among those participating in a dispute that certain kinds of data will justify certain kinds of conclusions. However, it is not clear that Toulmin believed logical types to be of this nature given the examples he provides. For example, Toulmin (1958) identifies "verdicts of criminal guilt" as one of the logical types of statements that express an assertion (p. 13), but such statements are not agreements among those participating in a dispute that certain kinds of data will justify certain kinds of conclusions; they are merely statements of a certain type. Further, it is claims ("statements of our assertions") or data ("the facts adduced in their support") of an argument, as Toulmin explains (*ibid*), that are of different logical types, not some agreement regarding the relation between them. This leads to another problem with Hanson's interpretation of logical types: it seems to correspond more to Toulmin's notion of a warrant than it does to his idea of logical types. Recall how Toulmin (1958) characterizes the expanded notion of a warrant: 'Data such as D entitle one to draw conclusions, or make claims such as C…" (p. 98). However, it is not clear that Toulmin believed logical types to be warrants. Looking at the above example again, verdicts of criminal guilt usually function as the claim or data, and are not usually general hypothetical statements like warrants.

If we are to accept Hanson's interpretation of logical types, it would conflate Toulmin's whole schema of argument, because we could then speak of data, backing and conclusions being of different 'warrants' (with 'warrant' in place of 'logical types'). This is evidently not what Toulmin meant.

This leads us to another problematic way in which Hanson's account of "logical types" does not square well with Toulmin's overall usage of the term. Hanson (1989) says that logical types define argument fields, but that they are defined in such a way that "a field of argument is constituted a priori by the similarity in logical type of conclusions, data, and backing" (p. 276). In other words, it is a similarity in the logical type of data, backing and conclusions that separates one field from another. However, this is not how Toulmin uses the word 'logical type' since he acknowledges there are fields where arguments often involve a "jump" in logical type somewhere between the data and the conclusion. In the third essay of *The Uses of Argument*, the next place where the concept of logical types arises, Toulmin (1958) says that "the step from D to C will in some cases involve a transition of logical type—that it is, for instance, a step from information about the past to a prediction about the future" (p. 121). Toulmin (1958) does not use the term again until the final essay; here he also speaks of 'logical type-jumps' but adds the idea of a type jump between backing and conclusion (p. 224). These logical type-jumps are characteristic of the substantial arguments of non-analytic fields (p. 233). They indicate an apparent logical gulf within an argument that is unacceptable by analytic standards. Hanson's interpretation would not accommodate substantial arguments and substantial argument fields. This is because he characterizes argument fields as characterized by logical types where arguments are justified with the same kind of support, whereas substantial arguments contain data or backing which is of a different logical type than the conclusion. Thus, it appears that Hanson's account does not properly characterize

Toulmin's argument fields using logical types, since it does not allow for substantial arguments or substantial argument fields.

One way to remedy this defect is to assume that Toulmin uses the word 'logical types' in two senses: we can distinguish between inter-field logical types and intra-argument logical types. Inter-field logical types would be those which separate arguments into different fields. They determine the field to which an argument belongs. Intra-argument logical types, on the other hand, would occur within a given argument and are what determine whether or not an argument has a supposed, unacceptable "logical gulf" according to analytic standards.

While this distinction would help Hanson's interpretation in some ways, Toulmin does not seem to make any distinction at all between logical types within an argument and logical types that distinguish fields. In fact, on the page just before he explains how to assign arguments to different fields by logical types, he uses the term 'logical types' more in line with the intra-argument sense and so likely also meant that these logical types can also distinguish between fields. Though it initially showed potential, distinguishing between two different types of logical types is problematic. And, even if we do distinguish between senses of the word 'logical type', Hanson's account is still left with the problem of conflating logical types with warrants. Thus, Hanson's interpretation of logical types still does not cohere with Toulmin's account of logical types.

This is hardly Hanson's fault, though, because Toulmin himself was never clear on what a logical type was. In fact, with what we can gather of what Toulmin meant by "logical types", the concept of fields in terms of logical types is incompatible with many

of the examples of fields that he provides. If, for example, "Reports of present and past events" is a logical type, as Toulmin says (p. 14), then two arguments will be in the same field if they have data and conclusions that are reports of this type. However, reports of present and past events form the data and claims of arguments in multiple fields that Toulmin (1958) identifies, such as jurisprudence (p. 9), physics (p. 209) and psychology (p. 104). If we accept Toulmin's characterization of fields using logical types, then it would be possible for arguments in each of these separate fields to all belong to the same field, adding a further layer of ambiguity to Toulmin's already hazy account of fields.

Since Toulmin has provided us with such a scant description of logical types, and what he does give us is incompatible with his other, clearer descriptions of fields, I believe they are a non-starter when it comes to understanding argument fields. While some degree of vagueness can be acceptable, and I am sure Toulmin intended the term "logical type" to lack analytic precision, possibly to allow for imprecise boundaries between fields, I believe that the concept is far too obscure to be philosophically or theoretically useful in understanding argument fields in any significant sense. I suspect that Toulmin himself realized this, since the concept never again arises in his writings, either in *Human Understanding* or in *An Introduction to Reasoning* or in any of his other works that touch on argument evaluation.

We must remember that the theory of argument propounded in *The Uses of Argument* was highly provisional. In the introduction, he characterizes the essays contained within as "*ballons d'essai*" or "trial balloons" (p. 1). While many of the core ideas have survived to some degree, I contend that the use of the concept of logical types

to assign arguments to fields is not one of them. The most charitable interpretations of 'logical types' that have been explored all yield theoretical problems, so we are best to do without it, as Toulmin does in all discussion of fields subsequent to *The Uses of Argument*.

Even with the concept of logical types doomed to utter obscurity, we can still gather much from it about what Toulmin intended by argument fields. While his conception of logical types used to elucidate argument fields seems ill-conceived, we may be able to determine how Toulmin intended logical types to function. Toulmin believes that differences in logical types arise out of differences in the problems faced. He says that "the type-differences between our assertions and the information with which we support them spring from the very nature of our problems…" (p. 230). Such statements hint at the idea that Toulmin believed that different fields and the different acceptable processes of reasoning used within them are, at least in part, affected by the differences in the respective problems that they face. The concept of logical types may have been a provisional attempt to categorize fields in this way, but, as we have seen, it is too ambiguous and problematic. We can, however, now turn to the idea of differences in problems and purpose to see if they can help us better understand the concept of argument fields

2.4 Argument Fields and Shared Purpose

In field theory, another significant way in which argument fields have been divided is in terms of shared purpose. The leading proponent of this view is Robert C. Rowland. Rowland (1981) argues that, while argument fields can have numerous defining

features (such as subject matter, scholars of a discipline, etc.), the essential defining feature of every field is the shared purpose of a group of persons (p. 75). Argument fields are created, says Rowland (1981), "when a group of arguers shares a purpose in confronting a problem" (p. 62). He also says that shared purpose can also affect such characteristics of a field as the degree of formality and precision in the approaches taken (*ibid.*, p. 64), and that they influence the criteria by which arguments are to be evaluated within a field (*ibid.*, p. 66). These fields develop evolutionarily much as we see Toulmin's 'rational enterprises' develop in *Human Understanding*. The most successful fields are those which employ methods and criteria that bring the field closer to solving the problems faced; these methods or criteria can be rejected and replaced if they are not useful for this end (p. 62). This already seems like a more promising account of fields than what we can gather from the cryptic notion of logical types. The key issue for us, though, is whether or not this view corresponds with Toulmin's account of argument fields.

At first glance, Toulmin's account of fields seems compatible with the idea that purpose is a defining feature of argument fields. He does seem to think that different fields involve different sorts of problems faced, and so different fields would have different purposes corresponding to their respective problems. The types of reasoning or claim justifications within each field will, as a result, depend on the field and the types of problems they deal with. Toulmin (1958) says "[i]f fields of argument are different, that is because they are addressed to different sorts of problems" (p. 167). He criticizes

philosophers and logicians who, focused on their own problems, ignore the differences in problems between fields. "[P]reoccupied as [philosophers] are", Toulmin (1958) explains,

> with some one type of valuation, they blind themselves to the special problems involved in other sorts—to all the difficulties of aesthetic judgement, and to many of the issues facing one in the course of one's moral life (p. 34).

Further, in *An Introduction to Reasoning*, a field's goals are included among the key characteristics of fields (along with the degree of formality, degree of precision, and the mode of resolution) which tend to vary between fields (Toulmin, Rieke & Janik, 1984, pp. 274-6). Toulmin, Rieke and Janik (1984) also say that purpose is important when evaluating an argument within a given field. If an argument is a good one, they say, it must serve the purposes of the field (p. 114). Thus, Toulmin does believe that the goals and purposes of members of a field are important to any given field of argument.

But is shared purpose in the face of different problems *the* essential underlying feature of Toulmin's argument fields? I do not believe so, because Rowland's shared purpose can abstract too much from the context of argumentation and, as Rowland (1982) goes on to argue, an account of fields based on shared purpose is not compatible with the idea of disciplinary fields (p. 240-1).

Firstly, purpose does not give us a sense of the context in which an argument occurs. Two groups of persons can have the same purpose, but be contextually remote from each other or be in two totally different disciplines. If we want to give an account of Toulmin's argument fields, it would be important to distinguish these groups, especially if they have very little in common in terms of the available data, accepted warrants, types of backing relied on, and general modes of reasoning.

Secondly, the breakdown of fields into academic disciplines does not work on Rowland's shared purpose view of fields. According to Rowland (1982), scholars in multiple disciplines can have one purpose and scholars within the same field may have different purposes (p. 234). Therefore, Rowland's purpose-centered view of fields does not accommodate a theory of argument fields like Toulmin's in which some fields are disciplines.

Thus, Rowland's shared purpose is insufficient when it comes to understanding the essential nature of Toulmin's fields, because it cannot account for important differences in context and excludes disciplines as fields. Adopting purpose as the essential feature of fields as Rowland does may be useful, but it does not cohere with Toulmin's views on argument fields. But, while Rowland's shared purpose view of arguments does not cohere with Toulmin, we should still hold a special place for purpose and problems faced in shaping argument fields. After all, Toulmin, Rieke and Janik (1984) say that "the underlying goals of the human enterprise concerned determine the fundamental context for the arguments and claims in question, and so give them their power to 'carry conviction', by establishing the claims on a secure basis." (p. 256). But this does not mean purposes and goals are *the* essential characteristic of fields, it means they are *an* essential characteristic of fields. Further, a field may have a cluster of purposes and goals that hold it together, and these purposes can be important for the analysis and evaluation of arguments within that field as well as for differentiating that field from others. We will return to this point in the coming section.

2.5 Toulmin's Argument Fields Explained

(i) The Contextual Nature of Fields

We have discarded the notion of logical types as ill-conceived and rejected the idea of shared purpose as insufficient when it comes to understanding Toulmin's argument fields. A further difficulty with these ways of defining fields is that they do not do enough to reveal what argument fields actually are; they function more as a means of differentiating argument fields and assigning arguments to fields.

It may seem that a proper account of Toulmin's argument fields will forever elude us. As Godden (2002) notes, Toulmin did not make a point of clarifying what he means by "argument fields" even on occasions when he had the opportunity (p. 370). And, if Rowland (1982) is right in saying that Toulmin uses the term 'field' in many ways that do not square with each other, then it would be an exercise in futility to try to find a coherent theory with the descriptions of fields that Toulmin does give us. How, then, can we even begin to understand argument fields? One place we can start is the feature of arguments that Toulmin believes is too often neglected by logical formalists: context.

It is abundantly clear that Toulmin believed that the context of an argument is crucial for its evaluation. In *The Uses of Argument*, Toulmin (1958) asserts that "utterances are made at particular times and in particular situations, and they have to be understood and assessed with one eye on this context" (p. 182). He also states that "language as we know it consists, not of timeless propositions, but of utterances dependent in all sorts of ways on the context or occasion on which they are uttered. Statements are made in particular situations, and the interpretation to be put upon them is

bound up with their relation to these situations" (p. 180). Finally, Toulmin seems to interchange the words "field" and "context" at one point, talking of "context-dependant utterances" and "context-invariant propositions" (p. 181). If Toulmin is using the words "field" and "context" interchangeably here, then it is clear that whatever delimits argument fields is essentially contextual.

In *An Introduction to Reasoning*, we get yet more indication that argument evaluation and argument fields are contextual in nature. Toulmin, Rieke and Janik (1984) claim that the kinds of information a person will need to produce in order to establish a claim will depend "on the nature of the enterprise concerned and on the particular contexts of the arguments themselves" (p. 41). They claim that "arguments do not exist in a vacuum. They are always set forth in a specific context, and this has a great deal of bearing upon whether or not they are sound or unsound" (p. 178). They also speak of "contexts of argumentation" (p. 67), and they put forward the crucial point that "[c]ontext determines criteria" (p. 256). This belief in the importance of context is retained throughout Toulmin's career, with Toulmin at one point labelling himself a "hardened contextualist" (1992, p. 3). It is obvious that Toulmin believed that contexts and the different methods of reasoning acceptable within them were incredibly important when analyzing and evaluating arguments.

We cannot leave the discussion at mere context, though. "Context" is such an imprecise term that it can be interpreted as broadly or as narrowly as one wants. Hence it could lead to a regress whereby each argument has its own field. Similarly, it could be so narrowed that each person is an argument field unto themselves. As Zarefsky (2007) says,

this would make the concept of an argument field "unattractive" (p. 805), and Toulmin clearly did not mean to use the term "argument field" in this way. Thus, we must characterize these contexts (or fields) in such a way as to avoid this problem.

In *An Introduction to Reasoning* there is a clue that might help shed light on the nature of argument fields. Toulmin, Rieke and Janik (1984) explain that "[i]n all these respects, practical argumentation involves similar elements and follows similar procedures, whatever the different human activities that provide forums for reasoning and so defines ''fields of argument'" (p. 271). The end of this quotation is significant. Human activities provide forums that define (at least in part) fields of argument. While "forum" is never given a proper definition by Toulmin, Rieke and Janik (1984), they do define it ostensively, pointing to examples such as "bars", "the breakfast table", "street corners", "law courts" and "scientific meetings" (p. 16). They seem to be different locations at/in which argumentation can occur. Further, Toulmin, Rieke and Janik (1984) say that the purpose of developing forums "has been to establish methods by which people who are prepared to collaborate in a debate can collectively arrive at resolutions of their disputes which best meet their common needs and interests". (p. 266). These forums or locations for resolution "vary from field to field", according to Toulmin, Rieke and Janik (1984, p. 259), and as they explain, "[l]aw court proceedings, medical consultation, professional scientific meetings, and the like are deliberately structured and conducted - in their role as 'forums of argumentation'- in such a way as to eliminate doubts and confusions about the 'rational standpoint' of the arguments presented within them" (Toulmin, Rieke and Janik, 1984, p. 239). Thus, it seems these forums not only define argument fields to some

degree, but are also useful in identifying which field an argument belongs to. For example, if we know that an argument occurred in a law court, we know that it is subject to the standards of law. However, the manner and the degree to which these forums are used to define argument fields are still rather unclear.

(ii) Defining Toulmin's Argument Fields

When defining argument fields, the tendency has been to look for key defining or differentiating features by which we can identify and distinguish different argument fields. However, definitions of this sort never adequately cohere with Toulmin's account of argument fields. If we want to understand and characterize Toulmin's argument fields, the best place to start is by looking at the basic kinds of fields he provides. Some argument fields Toulmin gives us are technical (e.g. the many disciplinary fields we saw in 2.2) while others are "very broad fields of experience" (which we called "non-technical fields") from which these specialized fields branch out (Toulmin, Rieke and Janik, 1984, pp. 118-9). While technical fields are relatively clear, being identified with disciplines, "non-technical fields" are left virtually unexplained. But given what little clues we have, we can identify some possible candidates.

We could interpret these non-technical argument fields as societies, cultures and/or communities given the important roles these three types of entities play throughout *An Introduction to Reasoning*. In the section on common sense where Toulmin, Rieke and Janik (1984) introduce the concept of a non-technical field, they say that "[t]o join in the activities of our society or culture as effectively as we do is largely a tribute to the success of our education" (p. 119). While they do not explicitly state here that societies and

cultures are non-technical fields, this quote might be considered somewhat of a *non sequitur* if they did not intend for societies and cultures to be non-technical fields.

Throughout *An Introduction to Reasoning*, cultures, communities and societies are also given the role of providing the foundations for technical enterprises just as these "non-technical fields" are said to in the section on common sense. With respect to sciences Toulmin, Rieke and Janik (1984) explain that

> [e]very human culture, as a result, has had at its disposal some body of collective ideas that are generally accepted as providing the most accurate and complete account of the workings of nature. Every human culture has developed institutions that embody those ways of thinking. And every culture has made some institutional provision for the critical transmission of those ideas[7] (p. 313).

Further, they affirm that "[e]ach human community has to discover for itself the virtues of an explicit and articulate body of 'scientific' ideas and the independent institutions for criticizing and refining them" (Toulmin, Rieke and Janik, p. 314). They also explain that "[t]here must be some group, or groups, of people in the society who have the responsibility for preserving and transmitting this critical tradition [i.e. 'the science of that period']" (Toulmin, Rieke, Janik, 1984, p. 315). Clearly, Toulmin, Rieke and Janik see technical fields like sciences as having their foundations in societies, cultures and disciplines. Since non-technical fields form the foundation of technical fields in this way, we have more reason to believe that societies, cultures and/or disciplines are what Toulmin meant by non-technical fields. And while the fact that non-technical fields share an important characteristic with societies, cultures and disciplines certainly does not prove that they are identical, it does much to help the case that they are.

[7] Although Toulmin, Rieke and Janik (1984) do claim that some cultures can be called "unscientific" or "antiscientific" (p. 315).

The notions of societies, cultures and communities also recur throughout *An Introduction to Reasoning*, recognized as important contexts in which arguments and reasoning occurs. "There is an institutional and societal demand for reasons that can be critically tested", say Toulmin, Rieke, and Janik (1984, p. 371). They also say that "[w]e grow up in a culture that forms our initial values, attitudes, and expectations. It equips us also with ways of thinking and reasoning." (p. 66) And they say that "procedures of reasoning are inherently embedded in particular cultures" (p. 210). They identify common sense, which characterizes non-technical fields, as "the shared experiences of the members of a social group" (Toulmin, Rieke & Janik, 1984, p. 165). With regard to 'fallacies of unwarranted assumption', Toulmin, Rieke and Janik (1984) say they "occur when there is a presumption that it is possible to make the move from grounds to conclusion on the basis of a warrant shared by most or all members of the *community* when in fact the warrant in question is not commonly accepted" (p. 157 [emphasis mine]). In the section on ethical arguments, Toulmin, Rieke and Janik (1984) say that "[i]n any group of people - any *society, culture, or community* - we find ethical discussions revolving around considerations of those two corresponding sets…" (p. 396) and they proceed to consider differences and similarities between the different ethical ideas among them (p. 396-7). Furthermore, Toulmin, Rieke and Janik (1984) affirm that "the essential locus of reasoning is a public, interpersonal, or social one" (p. 10), and that "procedures of reasoning are inherently embedded in particular cultures" (p. 210). Given all of these points, societies, cultures and/or communities seem to be, at the very least plausible candidates for what Toulmin, Rieke and Janik mean by non-technical fields.

The more one considers it, though, the more tenuous this connection between non-technical fields and societies, cultures and/or communities seems. And there are many good reasons to reject all three as candidates for non-technical fields. Firstly, if societies, cultures and/or communities were what Toulmin, Rieke and Janik meant by non-technical fields, then they easily could have explicitly said so. Since they did not, it is an unlikely interpretation.

Secondly, "society", "culture" and "community" are all very vague terms and, like "context", can be interpreted as broadly or narrowly as one desires. A community can range from a group of five people who share similar values or interests to any village or town to a vast online gaming community. Similarly, groups of many sizes and natures can be identified as societies and the practices of small groups and large groups can be considered different cultures. Thus, they are not very desirable as argument fields.

Furthermore, to consider any society, culture or community to be its own argument field has the obvious potential to lead to a relativism that Toulmin would not accept. In *Human Understanding* Toulmin (1972) explicitly opposes relativism and since the aim of this essay is to evaluate the charges of relativism against Toulmin, it would be best if we can find an alternative interpretation that is less prone to relativism.

A further reason for rejecting these interpretations is that Toulmin, Rieke and Janik (1984) seem to indicate that non-technical fields are somehow tied to common sense. After all, they introduce these non-technical fields in the section called 'common sense'. They define common sense as "the sifted and digested experience of sensible, reflective people" (p. 119) and say that "this kind of 'common sense' covers a broad

range of kinds of experience, and creates the foundation from which more technical enterprises branch off as a result of specialization" (p. 119). This also is at odds with the interpretation of fields as societies, cultures and communities.

But this characterization is problematic too because the concept of common sense is also highly unclear. What constitutes a "sensible" and "reflective" person? Who decides who is sensible and reflective and who is not? Are the standards of being a sensible, reflective person field-dependent or field-invariant? Toumin, Rieke and Janik never provide us with answers to these questions and without them we can hardly come to a clear understanding of non-technical fields.

They compound this lack of clarity by making statements like, "[t]o the extent that all human beings have similar needs, and live similar lives, they share the foundation they need for using and understanding similar methods of reasoning" (Toulmin, Rieke & Janik, 1984, p. 119) and "[w]e are all members of a common 'rational community'…" (Toulmin, Rieke and Janik, 1958, p. 120). Are these statements supposed to mean that humanity as a whole is a field of argument? This is also unclear.

In the end, I think that the non-technical fields identified by Toulmin, Rieke and Janik (1984) are far too unclear to be able to come to a reasonable interpretation. All we are left with, then, is that disciplines are a type of field. But, while this interpretation of argument fields is incomplete, we can still work with it on the relativism issue. If it is shown that an unacceptable relativism results from Toulmin's theory when considering each discipline to be its own argument field, then we can take it that Toulmin's theory is unacceptably relativistic. This is because, regardless of whatever other argument fields

there are, they do not provide the standards for argument appraisal to any disciplines. Each field provides its own standards. This point will become clearer in the following chapter. If, on the other hand, it is shown that considering each discipline its own field does not lead to an unacceptable relativism, then, while it would not definitively save Toulmin from charges of relativism, it would provide some support for the claim that his theory of argument avoids it.

CHAPTER 3: TOULMIN'S FIELD DEPENDENCY THESIS

Now that we have a better understanding of Toulmin's argument fields, we can move on to his idea of field-dependence and those aspects of argument analysis and criticism that he claims to be field-dependent. There remains extensive disagreement regarding what Toulmin took to be field-dependent and what field-dependency entails. The aim of this chapter will be to clarify these issues. I will begin by establishing what components of argument Toulmin believes to be field-dependent, with special focus on the warrant. Following this I will explain what Toulmin meant by "field-dependence". In the end, I intend to establish that, for Toulmin, all the parts of an argument that correspond to the individual elements of Toulmin's layout are field-dependent. In other words, when it comes to analyzing and evaluating an argument, its data, warrant, claim, backing, qualifier *and* rebuttal are all field-dependent. I also argue that the field-dependence of an argument's data, warrant, backing, etc, according to Toulmin, does not necessarily mean that its data, warrant and backing are exclusive or unique to one field. It merely means that fields themselves determine, often by differing methods, whether or not the data, warrant or backing etc. of the argument is appropriate, relevant, acceptable, etc.

3.1 Warrants and Field-dependence

It has already been stated in the introduction that Toulmin believes that an argument's warrant, which legitimizes the step from the argument's data to its claim, is field-dependent. However, I have encountered at least one interpretation of Toulmin that denies this; Hanson (1989), whom we have already encountered in the previous chapter, argues

that warrants are (generally) not field-dependent on Toulmin's theory of argument (p. 279). An argument's field dependence, he maintains, comes from its use of backing (Hanson, 1989, p. 279). However, a close reading of *The Uses of Argument* seems to indicate that Toulmin believed the warrant to be field-dependent. As was stated in Chapter 1, Toulmin (1958) says that warrants correspond to the practical standards or canons of argument assessment (p. 98). Regardless of whether he believes that warrants correspond to both or merely to one of these things, he believes that the warrant is field-dependent, because he claims both the standards and the canons of argument assessment are field-dependent. In the first essay he says that all the canons of practical argument assessment are field-dependent (p. 38) and in the conclusion to *The Uses of Argument* he reminds us that "it must be expected that the standards [of argument assessment] will be field-dependent" (p. 255). Further, he also says that "[t]he data we cite if a claim is challenged depend on the warrants we are prepared to work with in that field…" (Toulmin, 1958, p. 100) This would indicate that the acceptability of an argument's warrant will depend on the field in which the argument occurs and so is field-dependent.

Hanson's conception of the warrant as field-invariant arises out of his conception of logical types, which, as we saw, was problematic on a number of levels. One reason Hanson (1989) believes warrants to be field-invariant is that they are generally of a field-invariant form (i.e. If D, then C) (p. 279). He also claims that a certain field can use the same warrant as another field; the difference or 'field-dependence' will be found in the backing for the warrant. For example, Hanson (1989) says that:

> an argument may depend on the warrant "a nude painting of a woman will be immoral". The warrant may be supported by different types of backing, different types of reasons. One backing might be,

> "nudity violates the moral standards of our religion". The argument then falls into a religious argument field. Another backing might be, "female nudity subordinates women in ways that ultimately dehumanize them". The argument then falls into a very different argument field, that of feminism (p. 283, n. 4).

It is true that the form of the warrant is field-invariant (Toulmin, 1958, p. 112) and that different fields can use the same warrant. However, as we will see, this does not mean that the warrant used in an argument is field-invariant in any way.

Toulmin believed that warrants in different fields tend to be established differently. As Toulmin (1958) explains, "after all we have seen about the field-dependence of the criteria we employ in the practical business of argument, it is only natural to expect that inference-warrants in different fields should need establishing by quite different sorts of procedure" (p. 129). Here it is made clear what makes warrants field-dependent. It is not that no two fields will use the same warrant. Rather, it is that different fields can establish warrants by different reasoning methods, and, most importantly, whether or not a given warrant is established or has any authority is determined the members of the field in question. We can consider the warrant "a nude painting of a woman will be immoral" to be the same warrant in all fields that accept it[8] and admit that it has the same form as other warrants. However, the fact remains that it depends on the field whether or not it is accepted, and the procedures by which a field establishes it can differ from other fields. This is what is meant by the field-dependence of the warrant.

[8] This might be why Toulmin does not include the warrant in the characterization of fields using logical types, something Hanson (1989) and Willard (1981) are sensitive to. Since multiple fields can use one and the same warrant, looking at the warrant alone will not suffice to place an argument in its proper field.

This highlights why I believe Toulmin uses the term "field-dependent" as opposed to "field-variant". The term "field-dependent" does not suggest variance from field to field as strongly as the term "field-variant"[9]. "Field-dependence" is more indicative of something relying on a field for its acceptance (or usage or establishment or appropriateness, etc.) than of something always varying between any two fields. However, there are some instances where it may seem that Toulmin is saying that field-dependence means variance between fields. In the first essay of *The Uses of Argument* he states that the field-dependent modes of argument assessment "vary as we move from arguments in one field to arguments in another" (p. 15). This does not necessarily indicate that field-dependent entities will always vary between fields, only that no two fields have the exact same stock of field-dependent elements (i.e. the same set of acceptable warrants, backing for warrants, data etc.). There can be different degrees of variance between fields among field-dependent aspects of argument. Some field-dependent things may often vary while others will only vary sometimes. For example, Toulmin (1958) explains that backings differ far more than warrants (p. 104), yet both are field-dependent. This account of field-dependence is better reflected in *An Introduction to Reasoning*, where field-dependent rules are defined as those particular rules "appropriate" to certain fields or forums, but not appropriate everywhere (Toulmin, Rieke & Janik, 1984, p. 17). A rule can be appropriate in multiple fields, but this does mean it is not field-dependent. Its

[9] Some authors have used terms such as "field-variant" when describing Toulmin's theory of argument. (See Whitehaus, 2012, p. 107; Abelson, 1961, p. 339; and Godden, 2002, p. 372. However, I would advise against this for the reasons just given and reasons to follow.

appropriateness or authority still relies on the field and is relative to the argument field in question and this is what makes the warrant field-dependent.

A reason why this account of field-dependence of the warrant may not be harmonious with Toulmin's account is the description of the warrant given in *An Introduction to Reasoning*. It is said that "[i]n different areas of discussion, the warrants on which our arguments rely are of different sorts and go by different names" (Toulmin, Rieke, Janik, 1984, p. 47). This would appear to indicate that warrants will always vary by field and that no two fields will use the same warrant. Nevertheless, we can still hold that Toulmin believed that two fields can use the same warrant, because here I believe what is being referred to is the stock of established warrants belonging to an argument field, not each individual warrant of a field. Thus, while there can be some overlap, the total stock of warrants acceptable within a given field will always be unique to that field. This does not preclude the possibility of two different fields using the same warrant.

Thus, we have established that Toulmin believed that warrants are field-dependent. Also, we have also made clear that its field-dependence does not mean that a warrant can only be used in one field; two different argument fields can use the same warrant. However, their respective stocks of warrants will differ in some way. Lastly, we saw that Toulmin believed that no two fields will have the exact same stock of warrants While I think that two different fields having the exact same stock of warrants is theoretically possible, if Toulmin considered it at all he must have thought the practical possibility to be highly unlikely; so much so as to be not really worth considering. But the

important point is that there can be overlap between fields in terms of the usage of warrants.

3.2 The Remaining Field-dependent Components of Toulmin's Layout

(i) Backing

In the first chapter we saw that Toulmin clearly states that the backing of an argument, which gives the argument's warrant its authority, is field-dependent. He speaks of "the *variability* or *field-dependence* of the backing needed to establish our warrants" (Toulmin, 1958, p. 104; italics in original). So whether or not the backing of an argument is field-dependent is uncontroversial. What is more contentious is whether or not backings will always vary between fields; can two different fields appeal to the same backing to establish a warrant? Toulmin does say that the kinds of backing we use to establish warrants "will change greatly from one field of argument to another" (p. 104), but it is less clear whether or not he thought backings in different fields will always be different. This is also true in *An Introduction to Reasoning*, where it is only said that backings "vary greatly between different enterprises and fields of argument" (Toulmin, Rieke & Janik, 1984, p. 67), but never that they always vary. Toulmin, Rieke and Janik (1984) do say that warrants in different fields "derive their foundation and authority from backing of quite different sorts" (p. 67), but this does not mean that backings always vary, only that each field has a stock of backings that set it apart from other fields. It does not rule out the possibility that some individual backings can be used by multiple fields.

While Toulmin certainly believed that the backings appealed to vary greatly from field to field, he accepted the fact that there are some backings that can be used by more

than one field. And we should expect that some backings can be used and are acceptable in multiple fields given the interpretation of argument fields in the previous chapter. For example, the backing Hanson (1989) mentions, "female nudity subordinates women in ways that ultimately dehumanize them". (p. 283, n. 4), could be used and be an acceptable backing for the warrant "a nude painting of a woman will be immoral" in multiple disciplines. This possibility of overlap in acceptable backing would also make sense given the account of fields in *An Introduction to Reasoning*. Toulmin, Rieke and Janik (1984) say that all technical fields arise out of non-technical fields (whatever these are). Some backings used in non-technical fields may be applicable in many special fields. However, many backings used in special fields will only be applicable within those fields (or perhaps very few fields) and not applicable to other special fields or non-technical fields.

Thus, much like the warrant, we should take it that what makes the backing field-dependent is not that no two fields will use the same backing. What makes it field-dependent is that its usage to establish warrants is decided by the field. Different fields, though facing different problems and using different procedures and methods of reasoning, can use one and the same backing to establish their warrants; these types of backings can be considered general backings. They are not necessarily usable in all fields, but are widely used in many. Other backings are special and can only be successfully used within the field or the select few fields in which they are accepted. We must not forget, though, that, regardless of whether or not the backing of an argument is

uncommon or ubiquitous among fields, its acceptability and proper usage still depends on the argument's field.

(ii) Data

Toulmin (1958) characterizes data as "factual information" (p. 98) and, since he says that the "sort of facts we point to… depend upon the nature of the case" (p.13), we can expect the data of an argument to be field-dependent. A similar sentiment can be found in *An Introduction to Reasoning* (1984), where it is said that the kinds of "grounds"[10] used to support a claim will depend "on the nature of the enterprise concerned and on the particular contexts of the arguments themselves" (p. 41). The field-dependency of the data also follows from the field-dependency of the warrant. According to Toulmin (1958), warrants are required to determine the relevance of certain sorts of data to a conclusion (p. 106). Since the warrant depends on the field and the warrant determines the relevance of the data to a claim, the data will depend on the field. As Toulmin (1958) explains, "the data we cite if a claim is challenged depend on the warrants we are prepared to operate with in that field" (p. 100). Thus, it should be clear that the data of an argument depend on the field to which the argument belongs.

The field-dependency of the data coheres with how we see fields operate; this is especially evident when we look at disciplinary fields. The datum, "The mass of the Sun is approximately 1.988435×10^{30} kg" will be relevant to and acceptable within the field of astronomy, but would be virtually inconsequential in fields such as ethics or jurisprudence. However, two remaining points about data must be reinforced. As

[10] In *An Introduction to Reasoning* (1984), the word "grounds" is used in place of the word "data". I will generally stick to using the term "data" throughout this essay.

Toulmin, Rieke and Janik (1984) stress, the data used within an argument field to justify claims will not be of one kind. They explain that there is a variety of kinds of data that can be used to establish different claims in a field. (p.42). Lastly, even though Toulmin (1958) says that "[t]he sorts of evidence relevant in cases of different kinds will naturally be very variable" (p. 16), this should not be taken to mean that no two fields can (successfully) use the same data. We can expect that some data can be used by more than one argument field, since some warrants can be shared by different fields. Additionally, different fields may use the same data to establish different claims within their respective fields.

(iii) Qualifier

In the *Uses of Argument*, Toulmin makes the important distinction between the force of modal terms and the criteria for their use. The force of a modal term, he explains, is the "practical implications of its use" while the criteria are that "by reference to which we decide in any context that the use of a particular modal term is appropriate" (p. 30). The former is field-invariant and the latter is field-dependent and "variable". For example, the term 'cannot' always has the force of ruling something out, but whether or not something should be ruled out depends on the standards of the field. This means that, with any modal term that we use to qualify our claims, even though its force or effect is the same for all fields, whether or not it is appropriate to prefix it to one's claim will depend on the field. This is reaffirmed in *An Introduction to Reasoning*, where Toulmin, Rieke and Janik (1984) show how the uses of qualifiers can change from field to field (pp. 88-90). Further, in *Return to Reason*, Toulmin (2001) says that "there is the strength

and character of the support that…these data and warrants provide, as expressed in the qualifier…" (p. 20). This means that the appropriateness of a qualifier will be a function of the data and warrant used, both of which, as we have seen, are field-dependent. This would make the qualifier of an argument field-dependent. Thus, in any argument that has a qualified claim, though the force or practical implications of the qualifier may be field-invariant, the qualifier used is field-dependent, since the criteria of its use are a function of field-dependent aspects of argument.

(iv) Rebuttal

Unfortunately, Toulmin does little to clarify the nature of rebuttals (Verheij, 2005, p. 359). Within an argument, the rebuttal functions to specify the exceptional circumstances, if any, in which the warrant loses its authority (Toulmin, 1958, p. 101), but little more is said of it and it remains unclear how exactly it factors into the evaluation of an argument. It will not be necessary for the purposes of this essay to provide an elaborate characterization of the rebuttal beyond what little Toulmin says, but there is one characteristic that I am sure we can affirm about the nature of the rebuttal: its field-dependence.

We have already established that the warrant of an argument will depend on the field in which the argument occurs. Whether or not an argument faces or should include a rebuttal will depend on the strength of that argument's warrant. As Toulmin, Rieke and Janik (1984) explain, the rebuttal registers the fact that the inference is warranted only in the absence of some particular exceptional condition which would withdraw the authority of the warrant (p. 96). Some warrants can legitimize the step to a claim unequivocally,

whereas others will legitimize the step to a claim provisionally or with some degree of uncertainty. Since the appropriateness of a rebuttal in an argument will depend on the strength of warrant used (which is determined by the members of the field in which the argument is given), we can conclude that the appropriateness of a rebuttal in an argument is determined by the field, an thus, that rebuttals are field-dependent. As Whitehaus (2012) affirms, rebuttals (and qualifiers for that matter) are "field-dependent forms of emphasis" (p. 109).

(v) Claim

Finally, we can expect the claim of an argument, the conclusion which one is attempting to establish, to be field-dependent, for similar reasons as the data. The claim of an argument will depend on the warrant and data of that argument for its acceptability and appropriateness, and these, we have seen, will depend on the field in which one is arguing. However, one may argue that the claim is not always field-dependent, because one may state a claim and not have to justify it in any way. In such cases, the claim does not seem to depend on data and warrants and so may not be field-dependent. I would still affirm that these claims are field-dependent because the field will determine the appropriateness, correctness and usefulness of the claim. "The defendant is in violation of the Road Traffic Act" may be an appropriate or effective claim in a court of law, but inappropriate or ineffective in a biology classroom or art gallery. Also, Toulmin, Rieke and Janik (1984) affirm that claims in themselves are not "freestanding" or "self-supporting". After one person makes a claim, another person can always ask further questions before they decide to accept to the claim. Toulmin, Rieke and Janik compare

claims to buildings, in that both require solid and secure foundations in order to be reliable (p. 9). This would indicate that claims are not field-invariant. Even if they are accepted without question, there must be some implicit foundation and this foundation would be field-dependent, consisting of the other field-dependent elements of Toulmin's layout.

Additionally, Toulmin, Rieke and Janik (1984) explain that the actual situation in which some claims are made can help when interpreting these claims and can clarify these claims' implications (p. 32). This hints at the contextual nature of, at the very least, some claims and thus supports the field-dependence of claims. Given all that has been said, I think it is safe to conclude that the claim of an argument is field-dependent.

To summarize the above arguments, in any argument, all of the particular elements corresponding to Toulmin's layout will be field-dependent. This is to say, the appropriateness, relevance, acceptability, correctness, etc. of the data, warrant and claim (and if they occur, the backing, qualifier and rebuttal) of an argument will all depend on the field in which the argument occurs. As Toulmin, Rieke and Janik (1984) explain, the first two parts of *An Introduction to Reasoning* looked at the contextual features that determine the relevance of all of the elements of Toulmin's model of argument (p. 123). Thus it should be clear that Toulmin held that each element of his layout is field-dependent.

(vi) Additional Field-dependent Aspects of Arguments

While the focus of this chapter has been on the field-dependency of the individual components of Toulmin's layout of argument, there are several other important aspects of

argumentation which Toulmin claims in *The Uses of Argument* to be field-dependent. One of these is "the sort of argument produced" (p. 13). Whether an argument is analytic or substantial, whether it requires an explicit backing or not, etc. will all depend on the field to which the argument belongs. Toulmin (1958) also affirms that "validity is an intra-field, not an inter-field notion" (p. 255). In other words, the goodness of an argument will depend on the field in which it occurs. This is one of the most crucial points that Toulmin makes in *The Uses of Argument*, summarizing most of what Toulmin has to say about the field-dependent aspects of argument.

In *An Introduction to Reasoning*, the field-dependent procedures of argument are further elaborated on, including degrees of formality, degrees of precision, modes of resolution and goals of argumentation (Toulmin, Rieke & Janik, 1984, pp. 271-6). Toulmin (1992) also eventually adds the forums of argumentation, the stakes and the contextual details of arguing as an activity to the list of aspects of the analysis and criticism of arguments that tend to vary (p. 9). These are all important aspects of argumentation that are essential to the proper analysis and evaluation of an argument, and they are all field-dependent.

3.3 Field-Invariant Components of Argument Analysis

Not everything is field-dependent according to Toulmin, so in order to round out our understanding it is best to explain the most important aspects of argumentation that he believes to be field-invariant. We have already seen that he believes that the force of modal terms is field-invariant, but Toulmin also says that the force of the warrant is field-invariant. "In all fields," says Toulmin (1958), "the force of our warrants is to authorise

the step from certain types of data to certain types of conclusions…" (p. 129). This means that, while individual warrants depend on their respective fields in order to be established, every warrant plays the same function of legitimizing the step from the data of an argument to a claim. Although Toulmin says that the force of the warrant is the same in all fields, this is somewhat misleading since he also says that warrants can confer different degrees of force on the conclusions, some legitimizing the step to unequivocal acceptance, some to guarded or qualified acceptance (Toulmin, 1958, p. 100). It would be more accurate to say that the 'general function' of a warrant, not its force, is to authorise the step from data of a certain type to conclusions of a certain type. Nevertheless, it is the warrant's authorizing role that is field-invariant.

Much of the discussion about Toulmin's notion of warrants has centered on this functional role that it plays in an argument. Hitchcock (2003), for example, sees the warrant of an argument as the justification of the step from the argument's data to the argument's claim. Bermejo-Luque (2006), on the other hand, finds this interpretation problematic, since it results in an infinite regress of justification that makes inferring claims impossible. She opts, rather, to construe the warrant merely as the 'explicitation' of the step from the data to the claim (p. 77). However, based on Toulmin's work, it seems that he held that a warrant justifies the step from data to claim, whether it is made explicit or remains implicit (which is usually the case). In *The Uses of Argument*, Toulmin (1958) gives some examples of warrants, "each of which", he says, "can justify the same sort of straightforward step from a datum to a conclusion" (pp. 103-4). At one point, also, he asks about which warrant we can produce "to justify our inference…" (p.

128). Additionally, Toulmin (1958) characterizes the warrant-eliciting question "How do you get there?" as one about the "justification" of the step from the data to the claim (p. 98). In *An Introduction to Reasoning*, Toulmin, Rieke and Janik (1984) indicate that one will provide a warrant to answer the question "how do you justify the move from these grounds to that claim?" (p. 26). Finally, in *Return to Reason*, Toulmin (2001) says that warrants are cited to "justify" (p. 20). Thus, it is clear that, according to Toulmin, warrants function to justify the step from the data to the claim. We may also say that Toulmin believes that the warrant "authorizes" this step; this term has the same basic implication and can be seen in the characterizations of warrants in *The Uses of Argument* and *An Introduction to Reasoning*. In fact, Toulmin, Rieke and Janik characterize the warrant as a "general, step-authorizing statement" (p. 46).

But what of the problematic regress which Bermejo-Luque points out? I do not think that understanding the function of the warrant as a justification is problematic for Toulmin in this way. As Pinto (2011) argues, it is the very distinction of the warrant of an argument from the premises (or data) which allows one to avoid such a regress (p. 315). Thus, Bermejo-Luque's modifications to the warrant are not necessary to avoid it. However, even if the warrant understood as justification did result in a regress, this regress would only really be problematic when one's standard is, in Toulmin's terms, highly analytic. To say that warrants, as justification, would require a problematic infinite regress of justification is to apply the analytic standard to what Toulmin says is a field-invariant feature of argument. This regress could be problematic for those seeking to meet an analytic standard, but for substantial arguments this would be less of a problem. We

saw in Chapter 1 that Toulmin believed that some warrants must be accepted without question before argument can begin in a field. Toulmin, Rieke and Janik (1984) reiterate this, affirming that warrants, for the most part, do not need to be tested or questioned on absolutely every occasion (p. 276). Some warrants, namely the more contentious within a field, may be subject to such scrutiny, but many are used with great success to address problems in different fields and do not need to be constantly questioned. Thus, according to Toulmin, warrants function to justify the step from the data of an argument to the claim, and any infinite regress of justification would only be problematic for those seeking highly analytic standards.

Finally, Toulmin (1958) also says that form of an argument (Data, so Claim, since Warrant) is field-invariant (p. 175). This point was mentioned briefly in chapter one. What it means is that, regardless of the field of argument, an argument can always, at the very least, be cast in the form seen in FIG 1.1. In *An Introduction to Reasoning*, Toulmin, Rieke and Janik (1984) extend this basic model to include backing as well, but this is only when an argument is, as they say, "wholly explicit" (p. 25). So, while each of the particular instances of data, warrant, backing and claim are field-dependent, the overall form is the same for all fields and thus field-invariant. This means that there is a formal element to Toulmin's analysis of argument. He does not completely reject formalism, but merely gives it a more limited, modest role in the analysis of arguments. We can use the general form of argument to identify the various functions that different statements play within an argument. However, the evaluation of arguments will require going beyond this

field-invariant pattern and turning to the field-dependent elements of argument analysis and assessment.

3.4 Do Argument Fields Provide their own Standards?

In her attempt to rescue Toulmin's theory of argument from relativism, Bermejo-Luque (2006) assumes that for argument fields to provide their own standards of argument appraisal results in an unacceptably strong relativism. Consequently, she rejects this interpretation of Toulmin and interprets fields, not as providers of standards, but as providers of truth-values (pp. 81-2). Assigning an argument to a certain field will allow us to ascribe truth-values to the data and warrant. These truth-values will be based on the views of the audience normally addressed in the field, the experts in the field who know the truth-values of the argument's data and warrant. Assigning that argument to a different field can change these truth-values and consequently change whether or not the argument successfully establishes its claim. Thus, the difference in argument appraisal among fields does not result from different self-imposed standards, but from a different assignment of truth-values (pp. 81-3).

I will not delve into whether or not Bermejo-Luque's account avoids a problematic relativism, but her claim that fields "do not provide standards for an argument in any sense whatsoever" (Bermejo-Luque, 2006, p. 81) does not cohere with Toulmin's theory of argument as he presents it. On multiple occasions in *The Uses of Argument*, Toulmin states that the standards of argument appraisal are field-dependent and thus internal to or arising from each individual field of argument. "The soundness of our claims to knowledge," he states, "turns on the adequacy of the arguments by which

we back them, and our standards of adequacy are, naturally, field-dependent" (Toulmin, 1958, p. 240). Toulmin also affirms that "we must judge each field of substantial arguments by its own relevant standards" (p. 234). In the conclusion, he sums up the underlying theme of *The Uses of Argument* as follows:

> Arguments within any field can be judged by standards appropriate within that field, and some will fall short; but it must be expected that the standards will be field-dependent, and that the merits to be demanded of an argument in one field will be found to be absent (in the nature of things) from entirely meritorious arguments in another. (Toulmin, 1958, p. 255).

All of these passages, and several others in *The Uses of Argument*, indicate that Toulmin held that the standards of argument appraisal used within a field are located within the field of argument. This attitude is retained in *An Introduction to Reasoning*, where Toulmin, Rieke and Janik (1984) state that there are significant differences between the standards of criticism in different fields (p. 259). They also make the important point that "context determines criteria" (p. 256). In other words, the standards by which we evaluate an argument will depend on the field of argument. Toulmin (2006) reinforces this claim in "Reasoning in Theory and Practice", when he says that we must be aware of how much standards vary from one area to another (2006, p. 27). Thus, it is evident that Toulmin believed that standards can vary and are determined by argument fields.

Further, the claim that fields ascribe truth-values to warrants may not fully cohere with Toulmin's vision of warrants. Toulmin characterizes warrants as "rules", "principles", and "licences" (p. 98). Thus, rather than saying that they are "true" or "false", it makes more sense to say that they are "accepted" "established", "used", "obeyed", or "disobeyed", or to speak of them as having "authority", "currency" or "legitimacy". Indeed, Toulmin never speaks of "true" or "false" warrants in *The Uses of*

Argument, but uses terms like "accepted" or "having authority" (p. 103). There is one case in *An Introduction to Reasoning* where Toulmin, Rieke and Janik (1984) mention a "generally true" warrant (p. 127). This might indicate that fields *can* assign truth-values to warrants. However, based on Toulmin's characterization of the warrant, in general he avoided calling warrants "true" or "false".

And, even if we accept that fields give truth-values to warrants, Bermejo-Luque (2006) fails to explain why this is not tantamount to providing standards. She holds that fields do not provide their own standards of argument appraisal, but rather that they provide truth-values to warrants. However, we have already seen that Toulmin (1958) says that warrants correspond to the canons or practical standards of arguments (p. 98). If these are the standards of argument appraisal, as Toulmin indicates, then, by giving them a truth-value, fields provide them or reject them as standards. One field can call a given warrant 'true', while another might be reluctant to call it 'true' or call it 'not true' or 'false'. In doing so, they provide a standard for which steps from data to claims are legitimate. Thus, even though Bermejo-Luque says that fields do not provide their own standards, by providing truth-values to warrants, fields actually are providing standards of argument appraisal. Whether we say fields "accept" or "establish" or give truth-values to warrants, it is important to remember that, by doing so, they are providing the standards by which arguments are to be appraised.

When it comes to the criteria for using modal terms, Bermejo-Luque (2006) says that they vary from field to field, but she says that this variation does not require that fields provide their own standards; it only means that the data which merit the use of a

particular modal qualification of a claim belong to the field (p. 84). This follows from her belief that we do not speak of things as merely necessary or possible, but as, for example, legally or economically necessary or linguistically or logically possible (p. 73). For example, if a claim is to be justified as "legally possible", it requires legal data or data belonging to the field of law. However, even if the proper qualification of a certain sort (legal, economical etc.) will require the corresponding kind of data, the acceptability of those data as a means to justify the claim will depend on the warrant, since not only is the proper use of a qualifier a function of the strength of the warrant, but the warrant also determines what data are relevant to the given claim. If a claim is to be qualified as economically necessary, it not only requires a warrant that justifies the step from data to claim unconditionally, but also a warrant that allows for the use of economic data as a means of justifying the claim. Thus, the criteria for the use of a modal qualifier will depend on what warrants are accepted in a field. And, since warrants are the standards or 'canons' of argument appraisal, the criteria for the use of modal terms are a function of the standards that fields provide.

Bermejo-Luque's interpretation of Toulmin is highly problematic. Contrary to what she says, Toulmin *does* believe that fields provide their own standards of argument by establishing warrants. And even if we accept her claim that fields provide truth-values to data and warrants, it is not clear why providing truth-values to warrants is not tantamount to providing standards. Finally, her claim that the criteria for using modal qualifiers do not require that fields provide their own standards is inaccurate, given that warrants, as standards, determine the appropriate manner and strength of qualification

3.5 The Temporal Aspect of Field-dependence

An oft overlooked aspect of Toulmin's field-dependency thesis, maintaining that "the standards for evaluating an argument are internal to the field to which it belongs" (Hitchcock, D. & Verheij, B., 2006, p. 4), is the temporal component. Not only are the field-dependent aspects of argument determined by the field, but they are located at a certain time within that field. As Toulmin (1958) explains,

> The exercise of the rational judgement is itself an activity carried out in a particular context and essentially dependent on it: the arguments we encounter are set out at a given time and in a given situation, and when we come to assess them they have to be judged against this background (p. 183).

Thus, when analyzing and evaluating an argument, it is not enough to know the field it belongs to. We must also know the time within the field at which the argument was made in order to fully capture the argument's context. When evaluating an argument we cannot just look to the most recent standards of its field. We must recognize that the standards used must be those acceptable in the field at the time the argument was made, even if those standards have become superseded. For instance, we cannot fault an early 19th century argument for Lamarckian evolution in the field of biology for failing to meet the standards of modern biology. Its goodness will depend on the standards of biology in the early 19th century.

The importance of keeping in mind an argument's temporal location within a field is maintained throughout Toulmin's works. It crops up within *An Introduction to Reasoning* in the section on the field of science (Toulmin, Rieke and Janik, 1984, p. 316). Toulmin, Rieke and Janik (1984) also affirm that "[t]here is no guarantee—and there can be no guarantee—that the same general kinds of reasoning, and the same initial

presumptions, must be accepted as authoritative and compulsory in all cultures and in all historical epochs" (p. 262) and that "[a]t any given moment…some established repertoire of argumentative procedures…possesses rational authority for the time being and so carries weight within the corresponding enterprise" (p. 265).Toulmin wants us to recognize the variability in criteria across different fields, but also over time within fields. When evaluating arguments we must be sensitive to these variations. In a later paper, Toulmin (1988) still maintains that "Rational judgments of practical adequacy are timely, not timeless… (p. 341). In an address given much later, Toulmin extols the virtues of "viewing ideas from a historical point of view…" (Toulmin, 2006, p. 25), by which I believe he means looking at ideas in terms of their place within the historical fabric. The field-dependent aspects of argument evaluation will not only vary by the field, but also across time within the field. So one must locate an argument at the time at which it occurred within a field in order to can apply the standards appropriate to the argument.

3.6 A Final Word on Field-dependence

When it comes to the field-dependent components of argument, it is important to keep two things in mind. Firstly, if something is field-dependent it means that whether it is acceptable, appropriate, relevant, correct, etc. is determined by the members of the field Secondly, deeming something as field-dependent does not rule out the possibility of more than one field accepting it. The warrant of an argument is field-dependent, meaning that it is up to a field whether or not a given warrant is established. But this does not mean that no two fields can use the same warrant. Field-dependence merely means that it is determined by the members of a field whether or not to accept them, reject them or

remain indifferent about them. Even though different fields can use the same warrant, that warrant is still field-dependent, since ultimately it is up to the individual fields whether or not to accept it and its acceptability can be established by means different from other fields. This crucial point about the overlap of field-dependent elements of arguments was recognized by Rowland (1982), who notes that some field-dependent aspects of argument can be found in more than one field (p. 242). As a result, there can be overlap between fields when it comes to field-dependent features of argument. Further, we can say that some components of Toulmin's layout will vary more than others. As we have seen, Toulmin (1958) himself seems to think that backings differ more than warrants (p. 104).

Despite this fact, field-dependence is often taken to imply field-exclusivity, and this supposed consequence has misled many who have tried to understand Toulmin's argument fields and his idea of field-dependence. In creating his interpretation of argument fields, for example, Hanson (1989) seems to think that a certain backing can only come from one field. But, as we have seen, Toulmin appears to accept that some backings can be more generally used than others and so can be used in multiple fields.

In this chapter we have determined that, while all of the components of Toulmin's layout of argument are field-dependent, the layout itself (i.e. data, warrant, so, claim) does not vary between fields. This is to say, all arguments involve the justification of some claim supported by some data in virtue of some warrant. Further, the warrants, as standards of justification, always serve the same function of justifying the step from the data to the claim. Finally, Toulmin's field-dependency thesis also involves a temporal aspect. We not only need to analyze and evaluate arguments in accordance with the

standards of the field in which they occur; we also must also analyze and evaluate arguments by the standards of the field that were in place *at the time* in which the argument occurred.

CHAPTER 4: TOULMIN'S FIELD-DEPENDENCY THESIS AND RELATIVISM

4.1 Relativity in Toulmin's Theory of Argument

I take it to be uncontroversial that Toulmin's conception of argument fields and his field-dependency thesis commits him to some degree of relativity when it comes to argument evaluation. If Toulmin holds that standards of argument appraisal are dependent on the field in which they occur, then, even though there can be overlaps in standards (both within a field over time and among different fields over time), the assessment of arguments will be relative to some extent. The question then is whether or not the nature and extent of this relativity is unacceptable.

Many have accused Toulmin's field-dependency thesis (i.e. the claim that the standards of argument appraisal are field-dependent) of entailing an unacceptably strong relativism. An early criticism of Toulmin made by Abelson (1961) hints at such a problematic relativism. While he never explicitly accuses Toulmin of relativism, he says that his field-dependency thesis entails that laypersons cannot criticize the arguments or standards of seasoned members of a field. This consequence, he argues, is both unwanted and untrue. While not a relativistic critique per se, the inability to criticize the arguments and standards of a field of which one is not a member leaves the door wide open for an unacceptable relativism. Other writers such as Schroeder (1997), Freeman (2006) and Godden (2009) have been more direct in their charges of relativism against Toulmin's field-dependency thesis. Schroeder (1997) warns of "a general tendency toward relativism within the Toulmin approach" (p. 102). He believes that this propensity towards relativism stems largely from Toulmin's conception of warrants and how they are

given authority by a backing. "By identifying the need for a backing," says Schroeder (1997), "Toulmin is implicitly acknowledging…the absence of universally accepted standards" (p. 102). In addition to other problems he has with the notion of argument fields, Freeman (2006) believes that "Toulmin's notion of field raised the spectre of relativism, with field-dependent standards of evaluation". "The problem," he says "becomes more acute if fields are understood as the discourse of a community, whose members are free to set standards" (p. 98). Because of these problems, Freeman abandons the notion of a field and opts to classify warrants epistemically. Godden (2009) argues that Toulmin's theory of fields could lead to a "doctrine of equal validity". By combining ideas of normative pluralism and field-dependency, he believes, Toulmin leaves us "no way of ranking, comparing or otherwise evaluating the different and conflicting judgements of validity and acceptability" (p. 3). He argues that this forces us into an unacceptable relativism.

It is easy to see why unacceptably strong relativistic interpretations would arise, not only because of the nature of Toulmin's field-dependency thesis, but also because of some of the claims he makes about argument field comparison and evaluation. In *The Uses of Argument*, he makes the following claim:

> [I] n considering, for example, the different grounds on which something may have to be ruled out in the course of an argument, we found plenty of differences on going from one field to another, but nothing which led us to conclude that any special field of argument was intrinsically non-rational, or that the court of reason was somehow not competent to pronounce upon its problems (Toulmin, 1958, p. 40).

And in *An Introduction to Reasoning*, Toulmin, Rieke, and Janik (1984) refrain from comparing fields, saying that they will not be arguing that any one field is more rational than another and that the only types of judgments they will make are 'intrafield'

judgments (pp. 277-8). These passages seem to indicate the inability or unwillingness to say that some fields of argument are more rational than others. On the face of it, this would seem (as Godden suggests) to commit Toulmin to a doctrine of equal validity where, for example, arguments in the field of mammology that are made in accordance with that field's standards cannot objectively be deemed better than arguments in the field of cryptozoology that are made in accordance with the standards of cryptozoology.

Despite the appearance of a pernicious relativism, Toulmin's theory is not without its defenders; some have come to the aid of Toulmin and tried to defend his theory of argument against these charges. The strongest defense of Toulmin's theory is made by Bermejo-Luque (2006). As we saw in the previous chapter, she believes that, while there are interpretations or of Toulmin that lead to a problematic relativism (see Burleson (1979), Klumpp (1981), Willard, (1981), Zarefsky (1982) Schroeder (1997)), a pernicious relativism can be circumvented with her interpretation of warrants and field-dependence. She believes that the problem of relativism arises mainly out of the idea that fields provide their own standards of argument appraisal. "The view that fields provide standards for argument appraisal", she claims, " is bound to at least a moderate epistemological relativism" (Bermejo-Luque, 2006, p. 74). To avoid this problem, she proposes that argument fields do not provide standards at all, but merely have the limited role of providing truth-values to the data and warrant of an argument, which, in turn, determine that argument's justificatory power (Bermejo-Luque, 2006, p. 81). She stresses that disagreements between fields are not caused by different standards, but by a

difference in the assignment of truth-values to the data and warrant (Bermejo-Luque, 2006, p. 82).

However, we have already pointed out several problems with her approach. We saw that not only does Toulmin believe that fields provide standards of evaluation, unlike what Bermejo-Luque claims, but also that she never makes clear how providing truth values to warrants (i.e. the standards of argument appraisal) is not tantamount to providing standards. So we will have to look elsewhere if we want to defend Toulmin's theory of argument against these accusations of relativism.

Another defense is seen in Weinstein (2006), who carves out a niche for metamathematics in Toulmin's project in order to thwart charges of relativism such as that of Siegel (1987). While Weinstein's (2006) case "draws upon the very metamathematical tradition that Toulmin is most often seen to reject", he believes that "a model of truth and entailment, based on mature physical science, not arithmetic, provides the support Siegel calls for, affording a normative basis for Toulmin's account" (pp. 49-50). Using the structure of inquiry seen in physical chemistry as the paradigm, Weinstein extracts a metamathematical model which he calls 'the model of emerging truth' (MET), which he believes can help provide a much needed normative foundation to Toulmin's theory of argument.

The remainder of this thesis will involve addressing this problematic relativism that Toulmin's field-dependency thesis appears to entail. This will involve examining the most salient charges of relativism and the most promising solutions to this problem in more detail to see whether or not they hold any weight.

In section 4.2, I will examine Abelson's (1961) criticism of Toulmin's field-dependency thesis. I show that, contrary to Abelson, Toulmin's theory of fields does not bar those outside of the a from evaluating the arguments of that field. Evaluating an argument merely requires knowing the relevant standards of the field in which it occurred at the time at which it occurred.

In section 4.3, I explain how Toulmin is concerned with evaluating justificatory arguments in terms of how successfully the argument justifies a claim. This is as opposed to the traditional logical analysis of arguments which focuses on truth-preservation as an evaluative ideal. Given this interpretation of Toulmin, we can see how Toulmin's field-dependency thesis allows for the inter-field criticism of standards, contrary to what Abelson maintains. A further consequence of this interpretation of Toulmin, as I will explain, is that his theory of argument does not commit him to a relativity of truth, only justification..

In section 4.4, I argue that despite the fact that Toulmin's field-dependency thesis does not commit him to a relativity of truth and permits the criticism of standards and purposes of other fields, it still falls prey to a pernicious relativism. This is because, as Godden (2009) argues, there is no way of correctly saying that any field's judgments are intrinsically or objectively better than any others. They are as good as the members of the field say they are, since they set the standards. So even if there were absolute truths, this would not save Toumin from relativism because there is no privileged standpoint where one can definitively justify having cognitive access to them. The justification will only be as good as the members of the field in which one is working say it is and that justification

cannot be said to be better or worse than any other field's. I also deal with Toulmin's theory of rational conceptual change in *Human Understanding* and Weinstein's MET both as possible solutions to the relativistic predicament. I determine, however, that neither provides us with a successful way to avoid the problem of relativism faced by Toulmin's field-dependency thesis.

4.2 Argument Evaluation

Abelson's (1961) argument against Toulmin's field-dependency thesis is one of the earliest to hint at a relativistic predicament. He argues

> [i]f all rules of reasoning are field-variant then the only ones who can formulate, evaluate, and improve on the rules are the practitioners of each field who know from experience what the rules are and when they work. But if there were no principles of inference common to medicine, jurisprudence, biology, physics, etc., principles that pure logic can formulate independently of these specific disciplines, then the layman would be utterly dependent on the specialist, and would be unable to distinguish good reasoning from poor reasoning without mastering the field himself (Abelson, 1961, p. 339).

Abelson believes that argument fields are closed off from the criticism of laypersons according to Toulmin's theory. Persons who are not members of a field cannot rightly criticize arguments or the standards at play within that field. Consequently, laypersons are at the whim of those within the field and cannot properly evaluate their reasoning. As Abelson (1961) says, this means that even the smartest logician could not assess the reasoning of an expert in a field in which they are a layperson (p. 339). In other words, those in any given field are exempt from criticism from those outside the field. Abelson believes this to be undesirable and even untrue, since we do often seem justified in and capable of evaluating experts' reasoning.

There are several problems with Abelson's argument, given what has been established about Toulmin's theory of argument thus far. The first is that he assumes that

no fields have any principles of inference in common. While I think that Toulmin would agree that this *would* make communication between fields impossible and hinder our ability to criticize their arguments[11], Toulmin did not believe that fields are completely isolated from one another in this way. As we saw in the last chapter, a field-dependent aspect of argument need not be unique to one field. Thus, unlike what Abelson says, Toulmin's theory does not entail that each principle of inference will be unique to one field. However, it would be unfair to fault Abelson on this because Toulmin had not yet published *An Introduction to Reasoning*, where the possibility of inter-field communication is made more explicit. For example, in *An Introduction to Reasoning*, Toulmin, Rieke and Janik (1984) affirm that the arguments of different fields can be related and that fields can borrow and use the findings of other fields (p. 277). Abelson really only had *The Uses of Argument* to go on, and there the possibility of the inter-field use of field-dependent aspects of argument is not as apparent. Nevertheless, we can now see from Toulmin's later writings that Abelson's initial assumptions are incorrect.

Abelson's claim that laypersons must remain totally shut off from a field according to Toulmin's theory is also incorrect. This claim follows mainly from Abelson's assumption that there are no principles of inference common to any field, but, since this assumption is incorrect, Abelson would have little reason to maintain it. In actuality, Toulmin's theory of argument does not require one to be an expert or member

[11] As Toulmin, Rieke and Janik (1984) say, "To engage in reasoned discourse, individuals must share more than a language. If they have quite different backgrounds, they must make the effort required to discover how far their total cultures are alike, and if there are no relevant overlaps, reasoning may be difficult or impossible" (p. 210).

of a certain field to criticize arguments within that field. One merely must know the relevant standards of argument assessment. If one knows the relevant standards of a given field in which one is not an expert[12], one can criticize arguments within that field in terms of whether or not they actually adhere to or meet the standards of argument appraisal belonging to that field.

For example, I am not an expert in pharmacology, but I know that samples of a population must be sufficiently representative of a population in order to properly generalize the results of a drug study to that population[13]. If a study uses an a insufficiently representative sample (say, only 90-year-old men) to determine the efficacy of a certain drug and then generalizes this result to the population at large, I know that their procedures were flawed and that the information gathered through this study has little probative value in the field of pharmacology. Among the strongest possible warrants for authorizing such an inference would be: if a group of ninety-year-old men experience effect *x* from drug *y*, then drug *y* will have effect *x* on anyone. However, this warrant, if backed at all, would be so weakly backed that all we could conclude is that it is *possible* that drug *y* will have effect *x* on anyone. I can criticize such a study on these grounds despite not being an expert in the field because I have an idea of the standards they accept. Thus, a layperson can criticize an argument within a given field by understanding whether or not the argument adheres to or meets the standards of argument appraisal

[12] It is important to note that we need not know *every* standard of that field or even *most* standards. We need to know only those relevant to the argument one is analyzing.
[13] Note that this standard is not unique to pharmacology

belonging to that field. In other words, one merely must be familiar with the relevant standards of an argument's field in order to evaluate that argument.

Of course, when arguments in a field get so technical or foreign that one cannot understand the claims or data being presented, it becomes harder to appraise the argument without a higher level of expertise in the field. However, I do not believe that this is a big problem; in fact, it is to be expected. No one can be familiar with the concepts and procedures at play in every discipline. When it gets to the point where the concepts and procedures are totally foreign to non-members of a field, then non-members could hardly criticize an argument that involves those concepts and procedures, any more than they could criticize an argument presented in a language they do not understand. But laypeople are not totally shut off from a field of argument in the way that Abelson claims, because, where there is commonality or understanding of concepts and procedures among fields of argument, members of those fields can engage in cross-field argument evaluation. And, importantly, one need not subscribe to a given standard in order to determine whether or not an argument is in accordance with it.

So, contrary to what Abelson (1961) claims, a person can evaluate an argument in a field in which they are not an expert. One merely must be familiar with the relevant standards of the field in which an argument occurs in order to evaluate the argument in question. This, however, still leaves the door wide open for an extreme relativism since it is not yet clear whether or not the standards of a field by which we should evaluate its arguments are open to criticism. Can we rightly and successfully criticize a field's choice of standards, or are these standards immune from criticism by the very fact that members

of the field agree on them? If the standards are immune from criticism, as Abelson believes, then Toulmin's field-dependency thesis may be open to a charge of unacceptable relativism. But, before we tackle this issue, we need to delve deeper into the essential nature of Toulmin's theory

4.3 Justification and Inter-field Criticism

(i) Justificatory Relativity

Hitchcock (2003) points out that "[d]espite the pluralism of [the title, *The Uses of Argument*,] Toulmin articulated his proposal for the layout of arguments in the context of one single use of argument, that of justifying one's assertion in response to a challenge" (p. 69). In fact, Toulmin's entire theory of argument evaluation is concerned with the justification of claims. In the introduction to *The Uses of Argument* he makes this quite explicit, saying "we shall be interested in justificatory arguments brought forward in support of assertions" (Toulmin, 1958, p. 12). Toulmin is not presenting a theory of argument that is aimed at evaluating whether an argument leads to the truth or when truth is preserved. He recognizes that the conventional evaluation of arguments using the concept of deductive validity as a means of truth-preservation does not adequately capture how we reason and when an argument is successful in context. Woods (2006) recognizes this in his reflections on Toulmin. Reasoning, he says, is only analyzable in relation to an agent's cognitive agenda and the cognitive resources available. (p. 386). He notes that we are imperfect cognitive agents, fraught with uncertainty and rarely able to attain the ideal of truth-preservation (p. 380). Logic, he affirms, must take this into account (p. 390). This

is what Toulmin has attempted to do with his theory of argument, creating a logic that better reflects how we reason and better captures when a claim is justified.

Justification, for Toulmin, is an activity whose success depends on context. It is not a timeless relation between propositions. While we may admit that a proposition objectively entails a claim, we can nevertheless fail to justify or establish that claim within a certain context using that proposition. For example, in pre-Einsteinian physics, the argument "the ball has a greater mass than it had before, since it is moving faster than it was before" would fail to justify that claim using that datum, even if the premise even if the data is accepted as true. This is because pre-Einsteinian physics did not accept warrants that would legitimize the step from that datum to that claim (such as "If something is moving faster than before, its mass will be greater than it once was") even though the datum can be said to objectively entail the claim. In such cases, the claim would not be justified by the data in that field. The bottom line is that justification, for Toulmin, is a social and contextual activity whose success depends on the acceptability of the data and warrants within a field.

Toulmin realizes that whether or not a claim is justified given a certain set of data is going to vary and he chooses argument fields as the points of reference when analyzing these variations. We saw in the last chapter that the data of an argument are field-dependent, so the success of an attempt to justify a claim in a field will depend on the acceptability of the data in that field. If we offer an argument that uses data unacceptable within a field, then, even if the data are correct and objectively entail the claim, that argument will not successfully justify the claim in that field. The standards of justification

(i.e warrants) are also field-dependent, that is, given authority within a given argument field by that field. According to Toulmin's theory, a claim can only be successfully justified in a field if it is justified in accordance with the standards of that field. If a challenger asks an arguer to make the warrant explicit and the warrant or backing presented is unacceptable in that field, then the arguer does not succeed in justifying the claim in that field even if the data objectively entail the claim. Thus, the justification of a claim based on a set of data is a function of the acceptability of data and the acceptability of the warrant used to authorize the step from the data to the claim.

We also must remember, though, that the time in which the argument was given is important because the field of argument in which the argument was made may accept a standard now that the argument employs, but not at the time when the argument was given. Even though the field would come to accept the standard, the argument fails to justify its claim in that field. A good example of this is given by Hitchcock (2003).

> A logic student in the 1920s who considered axiomatized Peano arithmetic could not use the correct generalization that no consistent axiomatization of arithmetic is complete to draw the conclusion that axiomatized Peano arithmetic is incomplete, because this generalization had not yet been shown to be true (p. 214).

In other words, to argue that Peano's axiomatization is incomplete, on the grounds that it is a consistent axiomatization of arithmetic (even if we admit that that this holds timelessly), would not justify its claim in 1920's logic since that standard had yet to be established. Thus, the argument would fail to justify its claim even though the data objectively entail it. When using data acceptable to a field at the time and standards acceptable to a field at the time, an argument will successfully justify its claim in that field. Putting this all together, we can say, then, that for Toulmin, a claim is justified by

an argument only if that argument uses data acceptable to the field in which it was given at the time the argument was made *and* that argument uses standards acceptable to the field in which it was given at the time when the argument was made.

Of course justification is not a black or white matter. Standards for argument evaluation (i.e. warrants) can have varying degrees of acceptability within a field and over time, so we can also expect there to be degrees of justificatory success to correspond with this. Well-established standards in a field are best to use to justify a claim in a field. Arguments in a given field that use standards that are most acceptable to that field will have the most success at justifying their claims. The less acceptable or more contentious the standard, the less successful the justification will be. Importantly, we must be aware of the strength of a standard or warrant in a field because it will determine how qualified our claim must be in that field. If the standards by which we justify a claim are strong enough, we can state the claim without qualification or with qualifiers such as "necessarily" or "certainly". If the warrant is weak, then the claim which it was used to justify needs to be more strongly qualified. And since the acceptability of the data can come in degrees, we may need to qualify our claim depending on the strength of the data[14]

[14] While Toulmin usually says that the strength of qualification will depend on the strength of the warrant, I think he allows for the fact that the strength of the data can determine the need for a qualifier. Toulmin (2003) states that "there is the strength and character of the support that…these data and warrants provide, as expressed in the *qualifier*…" (p. 20). This would seem to allow that, even if the warrant was strongly backed (i.e. highly acceptable), contentious data would require us to state our claim with some reservation.

I think all of this makes some degree of sense since we can see arguments operate this way. An argument may justify the existence of the Loch Ness monster in cryptozoology, but fail to do so in evolutionary biology. An argument may have justified the existence of aether in 19th century physics, but would fail to justify its claim in physics today. An argument for the existence of the Loch Ness monster may justify its claim in cryptozoology but simultaneously fail to justify its claim in anthropology. Just because data and warrants used in the past are now seen as false/unacceptable/insufficient doesn't mean the argument was unsuccessful. It may have met the standards within its field when it was given, and thus successfully justified its claim. Just because we do not accept the standards of one field does not mean that an argument employing those standards cannot successfully justify that claim in that field. Toulmin's 'rival' approach to argument evaluation recognizes these important aspects of argumentation and helps us better evaluate the justificatory success of arguments in their original contexts.

(ii) Criticizing Standards and Purposes

We saw that Abelson argued that, if we accept Toulmin's field-dependency thesis, one cannot criticize a field's standards unless he or she is a member of or expert in that field. The same might also be argued about the purposes of a field. Can we criticize the purposes of fields we have no part in? In actuality, members and non-members, experts and non-experts alike *can* criticize the standards (i.e. warrants) and purposes of that field. Toulmin's field-dependency thesis does not rule out such inter-field criticism. Not only that, but such criticism can also be successfully justified. The success of the criticism will merely depend on the field in which the criticism was given.

If one criticizes the standards of a field from within that field, whether they are a member, non-member, expert or layperson, then they must use that field's accepted standards in order to be successful. The same goes for the criticism of a field's purposes. It will only be successful in that field if the criticism is in accordance with the standards of that field. For example, if I am in the field of theology (for example, at a theology conference) and present an argument criticizing the standards of that field using standards which are not accepted in theology, then the claim is not justified in its context, even if the data are acceptable in theology. However, we can also criticize the standards or purposes of a certain field from the standpoint of a different field. If one makes the same argument criticizing the standards of theology in the field of evolutionary biology (e.g. in an evolutionary biology journal), employing standards acceptable within evolutionary biology, then, assuming the data are also acceptable, the claim critical of the standards of theology will be successfully justified. Even though the argument is not in accordance with the standards of theology, it succeeds because it is in accordance with the standards of the field in which the argument is presented. One can similarly criticize the purpose of a field, for example, eugenics, but if we are in the field of eugenics and the argument is not in accordance with the standards of eugenics, the claim will not be justified. However, if we are in the field of social studies, and that same criticism is in accordance with the standards of social studies, then that criticism about the standards in eugenics would be justified.

All this means is that we can present an argument criticizing the standards and purposes of a certain field, but in order for the claim to be successfully justified, the

argument must be in accordance with the standards of the field in which we are presenting it. Otherwise, the claim will not be successfully justified. Thus, contrary to what Abelson claims, Toulmin's theory of argument does not prevent one from successfully presenting an argument that criticizes a field's standards. As long as said argument is in accordance with the standards of the field in which it is presented, its claim criticizing an argument field's standards will be justified.

One may find this interpretation of Toulmin problematic given that Toulmin (1958) states that "we must judge each field of substantial arguments by its own relevant standards" (p. 234). This statement appears directly incompatible with what has just been said about judging the standards of other fields. One might take it to entail that one can only criticize that standards of a field using that field's own standards, regardless of what field one is in. However, I do not believe Toulmin intended to say here that the standards of a field of argument or the field as a whole must be judged in accordance with that field's own standards. What I believe he means is that each '*argument*' in a substantial field must be evaluated using that field's standards. In the context of the paragraph, the latter claim makes more sense than the former. Toulmin is talking about how we should give up applying an analytic standard to all arguments since substantial arguments often involve a 'type-jump'. He is talking about the evaluation of arguments here, not the evaluation of standards or the evaluation of fields of argument.

In the conclusion of *The Uses of Argument*, Toulmin (1958) talks about how we should keep an eye out for differences between argument fields and that "[w]here differences of these kinds [i.e. analytic vs. substantial] are found, we should normally

respect them" (p. 256). Again, this might seem to some as saying that we should (normally) refrain from criticizing the standards of a field when they differ from our own. However, I do not believe this is what Toulmin intended. What Toulmin means is that we should normally not criticize differences in a field *if we want our claim to be justified in that field*. For example, there is nothing preventing us from presenting an argument in another discipline whose standards differ from one's own area of specialization, but one's claim will not be justified in that discipline if it is not in accordance with its standards. Toulmin even admits that "we are at liberty to try and think up new and better ways of arguing in some field which specially interests us" (p. 256). We can present a standard foreign to a certain field and perhaps defend it in the form of a warrant-establishing argument. While that standard may eventually become acceptable within that field, one will generally fail to justify their claim in a field if it requires using standards foreign to that field.

Admittedly, Toulmin can be a careless writer at times. His concepts are sometimes left unclear (as we saw with the important concepts of argument fields, logical types and field-dependence) and his claims can be clumsily stated. Perhaps this was all in defiance of the rigor one gets in analytic philosophy and traditional logic, but certainly it presents a challenge for his interpreters. Nevertheless, for the reasons given above, I do not believe that Toulmin's field-dependency thesis would prevent the successful criticism of other fields like Abelson maintains.

(iii) Justification vs. Truth-preservation

It is absolutely crucial to recognize that Toulmin's theory of argument involves evaluating arguments in terms of whether or not their claims are justified, because the successful justification of a claim does not necessarily entail the truth or correctness of that claim. When Toulmin says the standards of argument appraisal are field-dependent, this does not necessarily entail that a claim is true for a field if it can be established by that field's standards. It merely means that whether or not a claim is justified will depend on the field within which the claim occurred (as well as the time within which the claim was made). The production of a certain set of data for a claim about DNA replication may successfully justify that claim in the field of biology or even in other related fields of science, but may fail to justify that claim in another discipline such as economics, law or religious studies. This is not necessarily to say that the claim is true for biology, only that it is justified in biology. Nor is this necessarily to say that the claim is not true in economics, law or religious studies or any field in which the argument fails to justify its claim. It is merely to say that the claim was not successfully justified in those fields using the data presented. The reason for this can range from a general lack of understanding of biological concepts, to a lack of resources, to a disagreement about the claim based on commonly held tenets of the field, but the crucial point is that it does not mean the claim is false in these fields. It merely means that the claim was not successfully justified in them. This is because justification, as Toulmin understands it, is a social phenomenon, not a timeless, mind-independent relation between propositions.

This all has two important consequences. The first, as Pinto (2006) has pointed

out, is that a shift in logic from truth-preservation to 'entitlement-preservation' will require argument evaluation to be grounded in epistemology (p. 127), or at least the area of epistemology dealing with the concept of justification. Under Toulmin's theory of argument we are not concerned merely with the truth of propositions and the preservation of truth, but rather with whether or not a claim is justified in a context. This will mean paying special attention to the warrants of arguments, because they are what justify or authorize the step from the data to the claim of an argument. As was mentioned in the previous chapter, Toulmin avoided calling warrants true or false. I have found only one case where Toulmin, Rieke and Janik (1984) claim the warrant to be 'true'[15] (pp. 126-7). Toulmin never claims that warrants *must* be true for an argument to be good. In his article on evaluating arguments on Toulmin's model, Hitchcock (2006) reaffirms this, saying that "[j]ustification is not the same as truth, or correctness" (p. 217) and that a warrant need not actually hold in order for an argument to be good (p. 214). "Fallible human reasoners," he explains, "with limited resources have no direct access to truth, or more broadly to correctness; they must make do with what at any given time they are justified in accepting." (Hitchcock, 2006, p. 214) Since members of different fields will have different access to resources and this access can change over time, it is to be expected that the acceptability of warrants will vary widely among fields as well as over time within a field. In order to properly evaluate an argument we must be sensitive to these differences and thus must be familiar with the context in which the argument was made.

[15] They say "[t]he backing B "gives us reason to believe" that the warrant *W* is generally true, and/or a reliable guide to future cases" (Toulmin, Rieke & Janik, 1984, pp. 126-7), but even here it is stated disjunctively.

The second important consequence of this shift to claim-justification is that truth need not be relative if we accept Toulmin's field-dependency thesis. A claim can be successfully established in an argument field argument, yet still be an objectively false or incorrect claim for that field and all fields.

As an objection to this interpretation, one may point to the fact that Toulmin (1958) believes that "[t]he soundness of our claims to knowledge turns on the adequacy of the arguments by which we back them, and our standards of adequacy are, naturally, field-dependent" (p. 240). One may believe that this statement commits Toulmin to a relativity of truth, since it is generally held that a necessary condition of knowing a claim is that the claim is true. If the standards of a field dictate what is knowledge within that field, they could dictate what is true. This would be very unacceptably relativistic. Toulmin (1958) also says that

> [t]he superstition that the truth or falsity, validity or justification of all our statements and arguments should be entirely independent of the circumstances in which they are uttered, may be deeply rooted; but away from the timeless conclusions and analytic arguments of pure mathematics the expectations to which it leads are bound to be disappointed (p. 240).

One may take this to mean that Toulmin believes that truth and falsity are field-dependent, which could very well lead to a highly unacceptable relativism.

However, to overcome this objection, we need only point out that a relativity of truth (we will return to the relativity of knowledge later) is not a consequence of Toulmin's field-dependency thesis. Sure, a relativity of truth is compatible with Toulmin's field-dependency thesis and may have even been accepted by Toulmin, but it does not necessarily follow from his field-dependency thesis itself, unless we want to equate justified claims with true claims in some way. However, we need not do this.

Thus, what is relative according to Toulmin's field-dependency thesis is justification, not truth. Whether or not a given claim is justified is going to be relative to the field in question, but the truth of that claim need not be. A claim can be justified in a certain field at a certain time even though it is absolutely untrue, and an absolutely true claim can fail to be justified. While Toulmin himself would likely be wary of there being absolute truths, his field-dependency thesis is compatible with their existence.

4.4 Falling Prey To Relativism

(i) Epistemic Relativism and Equal Validity

Godden's (2009) argument is probably the clearest and most threatening charge of relativism against Toulmin. He argues that we should abandon the concept of a field altogether when it comes to argument evaluation, because of the relativism it forces us into. Since Toulmin's field-dependency thesis entails that argument features such as the warrant and backing, the canons and standards by which arguments are to be evaluated, can vary among fields, Godden (2009) says it involves a "normative pluralism" (p. 2). Godden (2009) believes that this would lead us to a "full-bodied [epistemological] relativism" which he explains in terms of a "doctrine of equal validity" (pp. 2-3), a concept he borrows from Boghossian (2006). The doctrine of equal validity states that "[t]here are many different, yet "equally valid" ways of knowing the world ..." (Boghossian, 2006, p. 2). Since Toulmin's view involves the field-dependence of the standards of argument evaluation and a normative pluralism which entails that an argument can be valid or acceptable in one field and invalid or unacceptable in another,

Godden (2009) believes it leads us to this doctrine of equal validity (p. 3). Consequently, maintains Godden (2009),

> it seems that the rational judge is only able to offer verdicts of the following sorts: the argument is valid in field-A but invalid in field-B, or according to my field-dependent standards the argument is (in)valid – but according to your equally field-dependent standards it might well be valid, or finally, according to some field-dependent standard the standards of field-A are better than those of field-B and so field-A judgements are preferable to field-B judgements – but again, according to your equally field-dependent standards the opposite might be so. In none of these judgements is one able to categorically claim that some arguments are simply invalid, some conclusions are simply unacceptable, or some judgements are plainly more acceptable than others (p. 3).

In other words, one cannot merely say that an argument or judgment is good or bad, valid or invalid. One must always qualify such judgments with reference to one field or another.

Further, Godden (2009) claims that

> [b]eing deprived of any field-independent standard of measure or comparison, the rational judge is further compelled to concede that judgements made in fields other than his own cannot objectively be deemed to be any better or worse than his own (p. 3).

This means there is no way of objectively comparing or evaluating conflicting judgments of different fields. Nor is there any objective way to compare the validity and acceptability (i.e. the standards) of different fields. This, he believes, forces us into an unacceptable relativism. And despite the compatibility of Toulmin's field-dependency thesis with the existence of absolute truths and the ability to criticize the standards and purposes, Godden is correct.

Even if there are absolute truths, there is no way of coming to know them. Claims of truth, after all, need justifying like any other claim. However, all that is required to invalidate such claims is that they fail to meet the standards and procedures of the field in which they are made. Thus, a claim may be accepted as an absolute truth in one field and rejected as false in another. Since Toulmin gives us no objective way of determining that

the standards of another field are flawed, we cannot know whether or not the standards of the field rejecting the truth-claim is any better than the one affirming it. The members of the field of ufology may maintain that "'Extraterrestrial beings are among us' is an absolute truth", but this claim may be rejected or unacceptable by the standards of cosmology or theology. All we can say is that the claim is justified in one field and not in another.

And while one can justify a claim critical of the standards or purposes of another field (if it is in accordance with the standards of the field in which it is made), that critical claim may be rejected if made in another field. And again, since Toulmin's theory provides no objective way of determining that one field's standards are better than another's all we can say is that the claim is rejected by one set of standards and rejected by another. For example, the claim "The standards of cryptozoology are faulty" may be justifiable in modern zoology, but if made in cryptozoology might be flat out rejected. Since there is no objective way of determining that one standard is better than another, we are merely left with the fact that the claim is justified in zoology and rejected in cryptozoology.

(ii) Revisiting the Concept of Argument Fields

Perhaps we need to revisit our definition of argument fields. Does Toulmin give us a way to limit technical argument fields in some way to avoid having to call disciplines like cryptozoology, astrology, creation science, parapsychology, ufology and homeopathy "argument fields"? If we can do this, then we would not be required to say that disciplines like homeopathy or astrology provide their own standards. There are four apparent ways

of restricting the concept of a discipline to this end, but none of them actually succeed in helping Toulmin's theory avoid relativism.

The first way of restricting the notion of technical argument fields is to limit it to "rational" disciplines. Toulmin does hint at the idea that there are some field-invariant standards of rationality. For example, In *An Introduction to Reasoning*, Toulmin, Rieke and Janik (1984) say that "[A] rational discussion or reasonable debate can go on only between people who are ready to behave in ways that show that they are 'open to argument'" (p. 266). This would seem to indicate that an openness to argument is a necessary condition for rationality. Toulmin, Rieke and Janik (1984) also maintain that someone's argumentative conduct is rational "to the extent that he…is prepared to change his opinion when offered good reasons for doing so" and irrational when he "refuses to change it despite those reasons" (pp. 107-8). Thus, it would seem that the willingness to revise one's standards in light of new evidence is another necessary condition of rationality. If we restrict technical fields to "rational disciplines" using these standards, then perhaps we could avoid calling disciplines like creation science, astrology and homeopathy "argument fields".

This does not really solve the problem, though, because, even if openness to argument and a willingness to revise one's beliefs in light of new evidence are field-invariant standards of rationality, whether or not these standards are met still seems to be up to the individual fields. While one may claim that astrology fails to meet these standards of rationality, astrologers may agree that it does. They may hold that they are willing to revise their beliefs in light of new evidence, but simply have not yet

encountered evidence which, according to their own standards, would warrant changing their beliefs. Additionally, they may say that they are open to argument, but have merely encountered no compelling arguments that would warrant a change in position. While they may appear closed-minded and dogmatic by other standards, according to their own standards they may not be. Thus, dividing rational and non-rational fields by these criteria of rationality would not prevent us from considering astrology, creation science and homeopathy as argument fields.

The second way of limiting technical fields is to restrict it to "academic disciplines" (i.e. those taught at colleges and university levels). However, there are two reasons this still leaves us with our relativistic problem. The first is that there are colleges who teach subjects like homeopathy, astrology, parapsychology, acupuncture and creation science, so they do fall under this definition. But, even if were to find a way to write these off as fringe academic disciplines and exclude them as argument fields, there is still much tension between disciplines which would still present us with a relativistic problem. For example, consider the justification of claims about the beginning of the universe in theology vs. cosmology. The members of the former may be justified in saying a divine being was necessary to the creation of the universe, but the latter may be equally justified in denying this.

The third way of restricting technical fields is to limit them to sciences. This way we could avoid pseudo-scientific argument fields that provide their own standards for argument appraisal. This option is still problematic, though, because it is not entirely clear what makes something a science. And even if there were a field-invariant standard for

what counts as a scientific discipline, members of those fields which we may want to exclude from that category may be justified in calling themselves 'scientific' according to their own standards. And since these standards are no better or worse than any other, there is no objective way of saying which judgment is better or worse. Furthermore, some of the fields Toulmin identifies are not sciences (e.g. management, law, ethics and asthetics (Toulmin, Rieke and Janik, 1984)), so this option does not work on a number of levels.

One final option might be to conceive of fields as being embedded in one another in such a way that fields like homeopathy, creation science and astrology are embedded within the broader fields of medicine, biology and natural science respectively. As such, they would be bound to the standards of these broad disciplines as a whole. Firstly, there is nothing about Toulmin's theory of fields that demands that certain fields are embedded and bound by the standards of others. Further, he provides us with no way of categorizing fields in this way. Maybe creation science should fit under theology rather than biology; we have no way of telling. And even if Toulmin did provide standards, the members of a field could be justified in claiming that they are not bound by the standards of any broader field so long as that claim was established according to that field's standards. Finally, if there were a way of embedding fields in this way, it would cause further problems. For example, to say that homeopathy is a part of the field of medicine would mean an increase in the amount of disagreement among the members of the field of medicine. After all, many standards held by homeopathic experts are at odds with those held by more scientific medical fields. Since there would be an increase in disagreement among

members of the medical field and since justification relies on agreed upon standards, many scientific medical arguments that are typically seen as successful may not be viewed as such on Toulmin's theory. Thus, even if we could embed pseudo-sciences within the broader field of medicine, it would lead to undesirable consequences.

Since there is no apparent way to restrict the notion of technical fields that can prevent us from calling pseudo-scientific disciplines argument fields, we are forced to admit that such fields provide their own standards and so still clearly face a relativistic problem.

(iii) Rational Conceptual Change in *Human Understanding*

In *Human Understanding*, Toulmin (1972) lays out a detailed theory of rational conceptual change in scientific disciplines. His goal is to create a theory of rationality that avoids both relativism and absolutism. And since he builds on many of the ideas he presents in *The Uses of Argument*, one may think that the solution to our problems can be found here. Unfortunately, though, Toulmin's theory of rational conceptual change does not prevent his field-dependency thesis from resulting in a pernicious relativism.

Firstly, as Siegel (1983) argues, Toulmin's analysis of conceptual choice leads to relativism when there is lack of agreement among the members of a science. In 'clear cases' where members of a discipline do not dispute their disciplinary ideals, the agreed-on ideals determine the procedures of judgment (Toulmin, 1972, p. 236). However, in 'cloudy' cases where members of a science lack agreement on their disciplinary ideals, this cannot be the case. This is because, as Siegel (1983) explains, "[d]isputes in cloudy cases cannot be resolved by appeal to intellectual and explanatory ideals, since those

ideals are precisely what is in dispute in such cases" (p. 94). Toulmin (1972) explains that in cloudy cases scientists must reappraise their goals and standards of judgment (*ibid.*) and to do this requires appeal to "broader arguments involving the comparison of alternative intellectual strategies, in the light of historical experience and precedents" (p. 237). In other words, rationally settling the disputes in cloudy cases requires appeal to historical precedent.

Despite Toulmin's insistence that he avoids relativism, his theory still falls victim to it. As Siegel (1983) explains,

> Toulmin's analysis of cloudy cases leaves [conceptual] choice in such cases relativistic, in that the only constraint on the chooser is that he use his judgment. Choosers who espouse rival disciplinary ideals, and so rival views as to the importance of particular problems, and who therefore judge oppositely, have no more stringent constraints to appeal to, and, to the extent that their judgment is unconstrained, choose relative to their predilections (p. 101).

When there is lack of agreement within a discipline regarding that discipline's ideals, the rationality of choosing one concept over another seems to be bound by no more than the whim of a member of that discipline. This is clearly unacceptable and seems to commit Toulmin to a relativism even worse than does his field-dependency thesis in *The Uses of Argument*. As long as there is a lack of agreement in a field, it seems that any changes in concepts can be rational.

Secondly, if all the standards of argument appraisal are field-dependent, as Toulmin claims in *The Uses of Argument*, then all that is required to justify a claim regarding the rationality of a conceptual choice in a field is that it is in accordance with the standards of that field. For example, a parapsychologist presumably would argue that the concepts of reincarnation, auras and telekinesis have helped increase the field's capacities towards its explanatory ideals. These claims would be justified if they were in

accordance with the standards of their respective fields[16]. Given that there is no other standard for when a field's choice of concepts increases its explanatory power, it is up to the members of parapsychology to determine whether or not their concepts are rational. Thus, Toulmin's theory of conceptual change in *Human Understanding* does not save his field-dependency thesis from leading us into an unacceptable relativism.

(iv) Weinstein's Model of Emerging Truth

In order to avoid Siegel's charges of relativism, Weinstein (2006) endeavours to supplement Toulmin's theory with a metamathematical model as a way of providing a much-needed normative foundation. This model, which Weinstein calls the "model of emerging truth" (MET), offers a metamathematical account of truth and entailment based on physical science rather than mathematics, an account which may help us avoid our relativistic predicament[17].

MET is constructed using the structure of inquiry seen in physical chemistry. With physical chemistry as the paradigm, truth emerges from a progressive process of inquiry (Weinstein, 2006, p. 54). Truth, on this account, is "identified with the progressive appearance of a model that deserves to be chosen" (p. 54). That is, truth is an ideal to which scientific inquiry strives. Through a process of inquiry, truth, as an ideal limit, emerges and can be approached by sciences in increasing approximations as they develop and progress.

[16] Or, if we admit that parapsychology is a cloudy case, then these claims would be justified at the whim of any member of the field who would make them.
[17] Due to the highly complex nature of the MET I will be unable to present it in detail, but a more comprehensive account can be seen in Weinstein (2006), (2007) and (2013).

Despite the highly formal nature of Weinstein's MET, it allows for the preservation of Toulmin's theory of argument, such as his historical-contextual approach (i.e. his field-dependency thesis). In fact, Weinstein (2006) agrees with Toulmin that highly formalized models based on mathematics are inadequate for a theory of argument. He believes, however, that mathematical formalism is a valuable tool and still has an important role in the metatheory of such analysis (p. 49). However, it is not apparent that the MET is successful in saving Toulmin's field-dependency thesis from an unacceptable relativism.

The first thing is that, as was touched on above, it is not exactly clear what should count as a science. There is no reason why parapsychology, astrology or homeopathy, for example, should be excluded. And if, for example, parapsychology counts as a science, then it could have its own ideal of truth which has emerged through a process of inquiry and to which its members strive. The same can be said of any purported pseudo-science and this results in a highly relativistic notion of truth that certainly will not help save Toulmin from relativism.

Secondly, what counts as progress towards a given discipline's ideal truth still seems to remain relative to the standards of that discipline. Weinstein (2006) explains that

> [t]he key contribution of MET is that it enables us to construe epistemic adequacy as a function of theoretic depth and the increase of explanatory adequacy as inquiry progresses, rather than, as in standard accounts, as conformity to pre-existing models or predicted outcomes. (p. 56).

The problem here is that it is unclear who sets the standards for "theoretic depth" and "explanatory adequacy". Does each field set its own standards or is there an invariant standard? And even if the latter, we are still faced with the problem that it remains up to

the members of each individual field whether or not they are meeting these field-independent standards. Astrologers and creation scientists can claim that their theories have significant theoretic depth and that they increase explanatory adequacy. And as long as these claims are made according to the standards of their respective field, they are justified. And so epistemic adequacy becomes relative to each discipline, resulting in a deep epistemological relativism.

4.5 Haunted by Relativism

Given all of the above points, I am forced to conclude, as many others have, that Toulmin's field-dependency thesis leads to a pernicious relativism. And depending on what non-technical fields are, it may be even more severe.

Godden (2009) is correct when he says that the lack of field-invariant standards leads us into a "full-bodied epistemological relativism". With the total field-dependence of justification (i.e. the warrant), there is no objective way of evaluating the justification of a claim made in a certain field other than by using the standards of that field. And there is no objective way of determining that those standards are better or worse than the standards of any other field in any objective way. Consequently, even if there are absolute truths, we have no objective way of coming to know them or even if there are any at all.

All of this would demand a highly relativistic epistemological theory, one that may not even be possible to produce without being incoherent. After all, any epistemological theory produced could easily be dismissed by the members of another field on the grounds that it is not in accordance with that field's standards. In fact, Toulmin's field-dependency thesis would mean that some (or perhaps all) of the

arguments in this thesis could be accepted by the standards of one field and rejected by the standards of another. And if so, there would be no objective way of determining which field's judgments were better than the other's.

However, I do not, like Godden, think this problematic relativism necessarily warrants discarding of the concept of an argument field. The main source of the problem lies not in the concept of an argument field (unclear as the concept may be), but in Toulmin's belief that "all the *canons* for the criticism and assessment of arguments… are in practice field-dependent" (p. 38). With this field-dependency thesis, Toulmin allows different fields to set their own standards for justification and this includes setting the standards for when any field-invariant standards one might propose are met. In order to avoid this resulting relativism it would be best to rethink the field-dependence of standards. While we still may want to say that some standards of justification are field-dependent, we certainly would not want to say *all* are. This is not to say that these standards must be absolute, but I do not think that they should be entirely dependent on fields as we have understood them.

CONCLUSION

In this essay Toulmin's concept of argument fields has been examined and it has been determined that the concept is far too unclear to fully understand. A partial interpretation of the concept was salvageable since it was determined that technical fields are to be identified as disciplines. Toulmin's field-dependency thesis and which elements of argument evaluation are field-dependent have also been clarified. Finally, it was determined that this field-dependency thesis results in an unacceptable relativism.

In coming to this conclusion, I tried my best to interpret Toulmin charitably and made numerous attempts at defending his theory from relativism. While extracting a coherent theory from Toulmin's works is difficult enough, after prolonged reflection I feel that successfully defending a theory from relativism is not possible if it entails that all standards of justification within a discipline are provided by that discipline.

WORKS CITED

Abelson, R. (1961). In defense of formal logic. *Philosophy and Phenomenological Research*, 21(3), 333-346.

Bermejo-Luque, L. (2006). Toulmin's model of argument and the question of Relativism. In D. Hitchcock & B. Verheij (Eds.), *Arguing on the Toulmin model: New essays in argument analysis and evaluation (*pp. 71-85). Dordrecht: Springer.

Boghossian, P.A. (2006). *Fear of knowledge: Against relativism and constructivism*. Oxford: Clarendon Press.

Burleson, B.R. (1979). On the analysis and criticism of arguments: Some theoretical and methodological considerations. *Journal of the American Forensic Association*, 15, 137-47.

Freeman, J.B. (2006). Systematizing Toulmin's warrants: an epistemic approach. In D. Hitchcock & B. Verheij (Eds.), *Arguing on the Toulmin model: New essays in argument analysis and evaluation (*pp. 87-101). Dordrecht: Springer.

Godden, D.M. (2003). On Toulmin's fields and Wittgenstein's later views on logic. In F.H. van Eemeren, J.A. Blair, C.A. Willard & A.F.S. Henkemans (Eds.), *Proceedings of the Fifth Conference of the International Society for the Study of Argumentation* (pp. 369-375), Amsterdam: Sic Sat.

Godden, D. M. (2009). The epistemic utility of Toulmin's argument fields. Presented at The 8th OSSA conference on 3 June 2009 in Windsor Ontario.

Goodnight, G.T. (1982). The personal, technical and public spheres of argument: A speculative inquiry into the art of public deliberation. *Journal of the American Forensic Association*, 18(4), 214-227.

Gronbeck, B.E. (1981). Socio-cultural notions of argument fields: A primer. In G. Ziegelmueller & J. Rhodes (Eds.), *Dimensions of Argument: Proceedings of the Second Summer Conference on Argumentation* (pp. 1-20), Annandale, VA: Speech Communication Association.

Hamby, B. (2011) Toulmin's analytic arguments. *Informal Logic*, 33(1), 116-31.

Hanson, J. (1989). Argument fields, logical types, and shared purposes. In B.E. Gronbeck (Ed.), *Spheres of Argument: Proceedings of the Sixth SCA/AFA Conference on Argumentation* (pp. 275-285), Annandale, VA: Speech Communication Association.

Hitchcock, D. (2003). Toulmin's warrants. In F.H. van Eemeren, et al., (Eds.), *Anyone who has a view* (pp. 69-82), Dordrecht, The Netherlands: Kluwer.

Hitchcock, D. (2006). Good reasoning on the Toulmin model. In D. Hitchcock & B. Verheij (Eds.), *Arguing on the Toulmin model: New essays in argument analysis and evaluation (*pp. 203-18). Dordrecht: Springer.

Hitchcock, D. & Verheij, B. (2006). Introduction. In D. Hitchcock & B. Verheij (Eds.), *Arguing on the Toulmin model: New essays in argument analysis and evaluation (*pp.1-23). Dordrecht: Springer.

Hitchcock, D. (2011). Inference claims. *Informal Logic*, 33(3), 191-228.

Klumpp (1981). A Dramatistic Approach to Fields. In G. Ziegelmueller & J. Rhodes (Eds.), *Dimensions of Argument: Proceedings of the Second Summer Conference on Argumentation* (pp. 43-55), Annandale, VA: Speech Communication Association.

Kneupper, C.W. (1981). Argument fields: Some social constructivist observations. In G. Ziegelmueller & J. Rhodes (Eds.), *Dimensions of Argument: Proceedings of the Second Summer Conference on Argumentation* (pp. 80-87), Annandale, VA: Speech Communication Association.

McKerrow, Ray E. (1980a). Argument communities: A quest for distinctions. In J. Rhodes & S. Newell (Eds.), *Proceedings of the Summer Conference on Argumentation* (pp. 214-227). Falls Church, VA: Speech and Communication Association and American Forensic Association.

McKerrow, R.E. (1980b). On fields and rational enterprises: A reply to Willard. In J. Rhodes & S. Newell (Eds.), *Proceedings of the Summer Conference on Argumentation* (pp. 401-413). Falls Church, VA: Speech and Communication Association and American Forensic Association.

Pinto, R.C. (2011). The account of warrants in Bermejo-Luque's giving reasons". *Theoria,* 26(3), 311-320.

Rowland, R. (1981). Argument fields. In G. Ziegelmueller & J. Rhodes (Eds.), *Dimensions of Argument: Proceedings of the Second Summer Conference on Argumentation* (pp. 56-79), Annandale, VA: Speech Communication Association.

Rowland, R (1982). IV. The influence of purpose on fields of argument. *Journal of the American Forensic Association*, 18(4), 228-245.

Rowland, R. (2008). Purpose, argument fields, and theoretical justification.

Argumentation**,** 22(2), 235-250.

Ryle, G. (1971). Philosophical arguments. In *Gilbert Ryle: Collected papers volume 2* (pp.194-211). Hutchinson.

Schroeder, C. (1997). Knowledge and power, logic and rhetoric, and other reflections in the Toulminian mirror: A critical consideration of Stephen Toulmin's contributions to composition. *Journal of Advanced Composition*,17(1), 95-107.

Siegel, H. (1983). Truth, problem solving and the rationality of science. *Studies in the History and Philosophy of Science*, 14(2), 89-122.

Siegel, H. (1987). *Relativism refuted: A critique of contemporary epistemological relativism*. Dordrecht: D. Reidel Publishing Co.

Toulmin, S.E. (1958). *The Uses of Argument*. Cambridge: Cambridge University Press

Toulmin, S.E. (1972). *Human Understanding: The Collective Use and Evolution of Concepts*. Princeton: Princeton University Press.

Toulmin, S.E. (1988). The recovery of practical philosophy. *American Scholar*, 57(3), 337-352.

Toulmin, S.E. (1992). Logic, rhetoric and reason: Redressing the balance. In: F. van Eemeren, R. Grootendorst, J. A. Blair & C. A. Willard (Eds.), *Argumentation Illuminated: Proceedings of the Second ISSA Conference on Argumentation* (pp. 3-11), Amsterdam: Sic Sat.

Toulmin, S.E. (2001). *Return to reason.* New York: Cambridge University Press.

Toulmin, S.E. (2003). *The uses of argument*. Cambridge: Cambridge University Press

Toulmin, S.E. (2006). Reasoning in theory and practice. In D. Hitchcock and B. Verheij (Eds.), *Arguing on the Toulmin model: New essays in argument analysis and evaluation* (pp. 25-29). Dordrecht: Springer

Toulmin, S.E., Reike, R., Janik, A. (1984). *An Introduction to Reasoning* (2nd ed.) New York, NY: MacMillan.

Verheij, B. (2005). Evaluating arguments based on Toulmin's scheme. *Argumentation* 19:347–371.

Weinstein, M. (2006). A metamathematical extension of the Toulmin agenda. In D.

Hitchcock & B. Verheij (Eds.), *Arguing on the Toulmin model: New essays in argument analysis and evaluation (*pp. 49-69). Dordrecht: Springer.

Weinstein, M. (2007). Towards an objectivist account of truth in argument. paper presented at the AILACT session on 5 April 2007 at the APA Pacific Division meeting in Chicago.

Weinstein, M. (2013). *Logic, Truth and Inquiry*. London: College Publications.

Wenzel, J. (1982). On fields of argument as propositional systems. *Journal of the American Forensic Association*, 18(4), 204-213.

Whitehaus, C. (2012). Claim-evidence structures in environmental science writing: Modifying Toulmin's model to account for multimodal arguments". *Technical Communication Quarterly*, 21, 105–128.

Willard, Charles A. (1980). Some questions about Toulmin's view of argument fields. In J. Rhodes & S. Newell (Eds.), *Proceedings of the Summer Conference on Argumentation, Falls Church* (pp. 348-400), VA: American Forensic Association and Speech Communication Association.

Willard, Charles A. (1981). Argument fields and theories of logical types. *Journal of the American Forensic Association*, 17(3), 129-145.

Willard, C.A. (1992). Argument fields: A Cartesian meditaion In W. L. Benoit, D. Hample, J. Pamela (Eds.) *Readings in argumentation* (pp. 437-465). Berlin, Federal Republic of Germany: Foris Publications.

Zarefsky (1982). Persistent questions in the theory of argument fields. In W. L. Benoit, D. Hample, J. Pamela (Eds.) *Readings in argumentation* (pp. 417-436). Berlin, Federal Republic of Germany: Foris Publications.

Zarefsky, D. (2009). Well-plowed fields: In the eye of the beholder? In S. Jacobs (Ed). *Concerning Argument* (pp. 801-9). Washington, DC: National Communication Association.