CHAPTER FOUR

Cultural Systems – The Pragmatist Line of Argumentation

The nihilistic and absurd character of the nihilistic absurdities

Even though the Source Calculus was constructed properly from a formal, axiomatic standpoint, it has led us to three nihilistic absurdities. The formalist line of argumentation in Source Theory has therefore culminated in these absurdities.

What can we learn from the nihilistic absurdities? If we abandon the technical, formal phrasing of the previous chapter, we can summarize them as follows:

The first nihilistic absurdity shows that almost any sentence can be justified, as soon as it has a source and there is no non-arbitrary way to refute it. Moreover, any particular sentence can be justified by one source and refuted by another.

The second nihilistic absurdity adds that even in the selection of the sources themselves there is no reason for choosing one source rather than another. Any adoption of a source is just as arbitrary as any other.

The third nihilistic absurdity states that it is even possible to avoid choosing a source at all. As mentioned above, given the first two absurdities, this is no less reasonable than attempting to discover the truth about the world through the use of any given sources.

To what can we compare this situation where it is impossible to decide among possible sources? We can say that it is like a computer whose programmers have fed it several different programs. If we choose one of them, we will obtain a certain output; if we choose another, we will get a different output. There is no way of deciding which program is "correct", since such a decision would require a third program (what we have called an external decision), the choice of which is no more "correct" than the choice of any other, including the two existing ones. This is, in fact, a new, radicalized version of the old skepticist challenge.

At first it would seem that the conclusion to be drawn from this line of argumentation is radically relativistic, but it is actually even worse than that – it is nihilistic. If we were faced with only a few sources, and our line of argumentation led us to the conclusion that all of them were equally convincing, then we would be relativists. However, the number of possible truth sources is actually infinite, and for any given sentence it is theoretically possible to match a source by which it can be justified. Therefore, as long as there are no contradictions or other "internal" logical flaws in the speaking self's transmissions, any sentence can be justified.

To show the extreme absurdity of the nihilistic absurdities, I will present an example. Suppose that I build the following system, S(m99).

S(m99) is an isolated system whose only possible output is the weather in Tokyo. Its source model, m99, has only one sensory source, that of smell. This sense can pick only two odors: one of jasmine and one lavender; the other sources are the non-sensory basic cognitive tools and another source, d99, that transmits data as follows: When the agent who uses the system smells jasmine, it indicates that it is raining in Tokyo; while when that agent smells lavender, it indicates that it is now sunny in Tokyo. d99 is the most superior source in the model of S; all the non-sensory basic cognitive tools function only to process the inputs received from the sense of smell and transmit them to d99 to receive its output.

In terms of Source Calculus, S(m99) is a self-sufficient system. There is no way to examine its messages, as the only way to check the weather in Tokyo within that system is by the odor test. The system in itself is perfectly coherent, and any coherentist should approve of it.

Now suppose the agent can choose between S(m99) and the rational system, According to that system he should acquire data about the weather in Tokyo through seeing with his eyes or through secondary sources who transmit data of (reliable) sources who saw Tokyo with their eyes, or tertiary sources, and so on. This system, with its multiple sources, is susceptible to far more contradictions among its data than the simple S(m99). These contradictions, needless to say, may lead to severe incoherencies or uncertainties within it; but even if we solve these problems through hierarchy among the sources of the rational system or some other division of labor, the agent has no stronger justification for choosing the rational system than those that he has for choosing S(m99). Consequently, that agent has no stronger justification to choose the datum about the weather in Tokyo based on the odor in his room rather than the one based on the rational model. He will be equally justified in saying that in view of the impossibility of deciding between the sources, he will refrain altogether from believing anything about the weather in Tokyo.

In short, the nihilistic absurdities completely destroy any attempt to justify a system – *any* system. If we use a foundationalist line, it will lead us to a particularly strong version of the infinite regress problem; if we opt for a

coherentist line, it will lead us to the conclusion of justifying almost any possible sentence.

It is obvious that this is an absurd case that we cannot accept. Nevertheless, it arises as the result of rigorous argumentation, as explained above. The question that must be asked, then, is how to avoid such absurd situations, since they imply that one cannot believe anything, and thus one cannot think. Yet we think and believe all the time, and so we have to present a new framework for our discussion that will explain how we manage to do so.

One way that we can do this is to try to dismiss the Source Calculus altogether as flawed; another way is to try to find some sophisticated reasoning within the Source Calculus that will free us of the absurdities without abandoning the calculus itself; yet a third way is to try to limit the adoption of sources by imposing acceptance conditions on them.

I do not believe that we should reject the Source Calculus. On the contrary, I believe that it is useful and can serve us in areas outside of philosophy as well. The calculus works perfectly well insofar as it describes the logic of sources, data and transmission; it fails only at the point where it comes to the nihilistic absurdities, all of which have to do with the unlimited freedom to adopt sources and source-models. Once this flaw is cured or ignored, the calculus can continue working successfully. As I suggested in Chapter One, a flaw in part of a theory should not necessarily impair all of it.

As far as the second alternative is concerned, if others succeed in finding such reasoning, well and good, but I have not been able to do so. This leaves us with the third alternative.

If we want to delineate a formalist line of argumentation that uses the terminology of the Source Calculus to limit the possibilities for adoption through the use of criteria for adoptable sources, then we must admit that we may have to give up our intellectual integrity. It is only too likely that such criteria will create filters that accord with our intuitions – which is merely a euphemism for our prejudices – so that the filter we end up with will "just happen" to produce the systems closest to our hearts, probably beginning with the rational system. This method is untrue to the formalism of logic, and to the most basic tenets of philosophical thinking. It is a foregone conclusion, an artificial way of using a pseudo-formal cover to achieve the results we want in accord with our character.

The obvious conclusion is that we should rather act sincerely, without a formal cover. This means that if we cannot find a way out through a formalist line of argumentation, we should try a pragmatist one instead.

From the formalist line of argumentation to the pragmatist one

What do I mean by a pragmatist line? As I have explained in the Introduction, I do not embrace pragmatism *in toto*, but see it as a plausible outlet for crises

of good systems that are under a threat of sweeping dismissal because of a particular flaw that they entail.

The reason that Source Calculus leads to problematic consequences is that it is either too miserly or too generous, i.e., it either allows for no justification (in the foundationalist line) or for a sweeping justification for almost all possible data. The only way out of this entanglement is to find new criteria for the adoption of sources. These criteria cannot be based on purely formalist considerations, as those led us to the entanglement, but should also take the human context into account. In other words, they should not treat data as merely inputs and outputs of an information system, but also as thoughts; not treat source models not only as mechanisms to process data, but also as ways of thinking. This human point of view, which takes psychological and sociological aspects onto account, brings us close to the pragmatist approach.

In the pragmatist approach, a theory is true if it *works*. We will apply this criterion to sources and systems, and will say that sources can be adopted only if there is a system that is based on them and that system is *workable*. A system is workable when it has been shown to be one that can be employed by many people, in a variety of circumstances, for considerable periods of time, and is capable of providing them more or less coherent answers, which, if accepted as true, can serve them in practical life.

The pragmatist line of argumentation has two aspects: the psychological and the sociological. The sociological aspect is the one that deals with systems. While so far we have defined and studied the concept of systems in the logical setting of the Source Calculus, we will now deal with a limited set of systems which actually work among various groups of people, which we call **cultural systems**. The psychological aspect deals only with the connection of the speaking self (or any other subject) to the cultural system. While we have so far assumed that any person can activate any system, we will now investigate the mental conditions that make this possible in real life.

It should be noted that cultural systems are systems in a slightly different sense than logical systems. The differences – most of them in emphasis rather than substance – will be elaborated below. However, at this point I will mention a major difference: The database of a logical system is conveyed only as a set of data, while the database of a cultural system is conveyed as a set of data used by people. People not only "consume" the data offered to them by the system or transmit them to others but also develop them further. Indeed, this development is achieved through the use of the basic sources of the system, and thanks to that the logical sense of system is still pertinent, but the emphasis here is much more on the dynamic character of the system and the role of humans in its development. In the context of cultural systems we will therefore speak about the persons who receive the data of the system and develop it through the use of its basic sources as the **activators** (or **operators** or just **users**) of the system.

Cultural and personal systems; real and ideal systems

We demonstrated above that a system is defined by its sources. The sources we immediately think about are direct ones, which we may regard as the basic cognitive tools. These are functions F1–F8, elaborated above in Chapter One. They include (but are not exhausted by) the four traditional sources: "(1) external perception; (2) memory; (3) self-awareness (reflection, or inner consciousness); (4) reason". These sources will probably be part of every workable system, but they will not receive the same status in the model in every system.

If we wish to maintain the claim that a system is determined by its sources, then each person is a separate system. You (i.e. your mind, or the entirety of your sources and data) can be considered a system whose sources are your senses, your memory, your self-consciousness, your reason, etc., as well as a set of **witnesses** whom you consider reliable: your parents and teachers, some of your friends, some of the books you have read, some media that you trust, and the like. My sources, in contrast, include *my* senses, *my* memory, *my* self-consciousness, *my* reason, etc., as well as a series of witnesses whom *I* consider reliable: *my* parents and teachers, some of *my* friends, some of the books *I* have read, some media that *I* trust, and the like. Since you and I are not the same person, your senses are not my senses, your self-consciousness is not my self-consciousness, your memory is not my memory, your reason is not the same as mine (unless we adopt a strong rationalist approach), your parents are not the same as mine (unless we are siblings), your teachers are most likely not the same as mine, your friends are not my friends, we have not read exactly the same books and the media we trust are not exactly the same ones. According to the nihilistic absurdities, each of us can believe in our data with the same degree of justification. If we are divided on a particular issue, you cannot convince me that your data are true, and I cannot convince you that my data are true. In practice, however, all of us know that this is not the case in real life. In practice, we share a large number of the same sources, which we share with many others as well, and we can argue about many topics. Even if one of us does not always succeed in convincing the other, each of us can understand the other's internal logic. In other words, even if we do not share the same thoughts, we have very similar ways of thinking.

This last point obliges us to make two useful distinctions – one between **personal** (individual) and **cultural systems**; and the other between **real** and **ideal systems.** These distinctions refer to different planes of discussion. The first distinction involves the number of people who have adopted the system, while the second involves the internal stratification of the system itself.

I use the term **personal system** to denote the system used by a person (or any other creature that uses sources to think) which is constructed out of his or her personal truth sources. I use the term **cultural system** to denote a system used by a given community, society, or culture, which is constructed out of the

collection of personal systems of the various people who share sources of the same **type**.

"Type" is not a vague word. Two people share the same type of sources when these sources have the same function, but nevertheless have different identities, usually because one belongs to a particular system-activator and the other to another.

Let's continue with the above example. Let us imagine a system based on a model m8, which is comprised of the basic cognitive tools, testimonies of data transmitted by those tools, and, for the limited sphere of social conventions (which I will address below), communities, all arranged in a certain division of labor. In this case, "the basic cognitive tools" are the functions F1–F8 of *any* person. However, I do not have access to your basic cognitive tools, just as you do not have access to mine. When you tell me "I see a tree", my datum is your testimony about the seeing of a tree, not a direct sight of the tree. However, you would be in the same position if I said "I see a tree". I may trust your testimony as reliable under certain conditions (such as being verifiable by others), but you would apply the same conditions, dictated by m8, to my testimony. In such a case, we might well agree that model m8 is a common one: as a system, it accepts your testimony, mine and anybody else's, not as individual persons but as members of the community of the adopters of m8. We can thus define the community as a source in itself. The **community** of the adopters of a model – whom, when dealing with a larger culture, we will call the **cultural community** – will be marked by the letter h, followed by the name of the model in brackets. In principle, the definition of that community should be:

$$h(\mu) =def \{\alpha\}|\ \alpha::\mu$$

Which means that

$$\alpha::\mu \equiv a \in h(\mu)$$

However, for our purposes we will not be so strict as to demand the membership of all the community, and will often make do with a vast majority.

We should note that h(m):p does not imply m:p. For even if all the agents who fully adopted m agree on a certain datum, this does not mean that this datum was transmitted by the sources of m. As long as the adoption is not exclusive, it might well be the case that all of these agents adopted other sources (common or not), and that p was transmitted by one or more of those other sources.

Communities can serve as witnesses, and in that they are not much different from other witnesses; but I mentioned that they may have other roles, as sources for social convention, in the senses attached to this term by Marmor (2005), partly following Lewis (1969), I will refer mostly to conventional practices and languages. Both of these scholars characterize conventions as

"arbitrary", meaning that they cannot be rationally justified any more than their opposites. In the terminology of Source Theory we can explicate this "arbitrariness" as a situation in which the community serves not only as a secondary (i.e. mediating) source for other sources (such as reason), but as a final source. If a community transmits, often without any explicit declarations, that a certain behavior is a common practice in it, then it is so not because the testimony is veracious but because the very transmission of such a datum by the community makes it true (in a way, it resembles a performative utterance); and if a community of the speakers of a certain language transmits, again usually without any explicit declarations, that a given word or expression has such-and-such meaning in that language, then this is its meaning in that language (I will elaborate on this issue in Chapter Seven).

Let us continue with the system S(m8), which is founded on the basic cognitive tools, testimonies of agents who share the same model, and, for limited purposes, communities. If we, the adopters of the S(m8) sources, share the same sources, we ought to share the same data as well. Why, then, do we differ on so many issues? The answer to this question makes use of the second of our two distinctions. On the **ideal** level, we think within a system whose sources are our basic cognitive tools, with an intricate division of labor. We all know, however, that in practice, on the **real** level, this is not the case. Sometimes we do not make a full use of the data that the sources of our system transmit to us, and sometimes we do make use of data that are transmitted to us by sources that are not a part of the model we adopted. We therefore have to distinguish between the speaker's **ideal system** – the one he intends or presumes to use – and his **real system**, i.e. the one he uses in practice.

One of the reasons for the gap between the two types of system is that we often do not recognize these divergences and attribute the sources transmitted by alien sources to sources from within the model. This phenomenon will be called **misidentification of the source.** One example of this fallacy is the common phenomenon known as "wishful thinking". In that case, we believe that desired datum is transmitted to us by the basic cognitive tools, while in fact it is transmitted to us by our imagination, which is nourished by our will.

Let us consider the case of a contradiction between a general adoption and a particular transmission. We have three sentences:

(1) a::m8
(2) m8: p
(3) a: ¬p

a transmits a contradiction, and that is permissible in the Source Calculus, as long as a is not i. To be sure, we will judge it as a flaw. Therefore, i will not be able to fully adopt a ("fully" in the sense of subordinate only to logic), and will

determine a division of labor that will reject one of the three sentences. From a logical point of view, any one of the three can be chosen for rejection.

This is not so on the socio-cultural level. Here the general adoption seems to take priority. Suppose for a moment that a is a real person. Even though from a logical point of view a cannot keep all the three sentences at the same time, he actually does accept all of them, as many people do in real life. Now suppose we pointed out to a the contradiction between the three. We may assume that in that case we would discover that the significance of (1) transcends its mere logical value: It makes a a part of the community of the adopters of m8. This is even more compelling when m8 is a model on which a whole culture is based. The adoption of m8 expresses the speakers' view that the ideal system is the one based on the general adoption, and the real system that he uses is flawed.

In this case, the gap between the ideal and the real systems overlaps the gap between the cultural and the personal systems. But the same could be true if we put h(m8) instead of a. Indeed, the entire community of the adopters of certain source models do not always, for various reasons, actually follow the models they presume to accept. In other words, there can be a gap between the real system and the ideal system within one cultural system. From a formalist point of view, we can take the real and the ideal systems as two equally full-fledged systems, but from a sociological point of view (which is relevant to the pragmatist line of argumentation) the sharing of the ideal system is what unites the various agents and turns them into a community. Even if their real systems greatly differ from one another, their "official" allegiance to a single ideal system, and their basic willingness to correct their real systems to fit it, serve as a common denominator. The ideal system thus has a symbolic value within the real system, and joins together with other elements of that system which together constitute its **culture** or, when developed and preserved through time, its **tradition**.

The concept of tradition has attracted much scholarly attention in social scientific contexts, especially since the publication of Edward Shils's influential book on the topic (Shils 1980) and the critical response leveled against it by Eric Hobsbawm (Hobsbawm 1983) and others (for example: Heelas 1996). In this context, however, I use the term in a particular sense that relates to Source Theory, tracing the tradition back to its fundamental, epistemic roots.

There are numerous cultures and traditions in the world. In this book I will discuss mainly two: the Western Rational Tradition (**WRS**), and the Monotheist Religious System (**MRS**).

WRS is basically the same as m8 as described above, namely, founded on the basic cognitive tools, testimonies of data transmitted by those tools and, for particular limited purposes, a set of communities, all arranged in a certain division of labor. **MRS** is based on the same sources as WRS, but also on the testimonies of the Holy Scriptures. Indeed, even though the three major monotheist

religions differ on the question which Scriptures these are, the source-theoretical statuses of these texts within their system models, as well as the internal disputes about their statuses, are basically very similar. (I must nevertheless add, for the sake of transparency, that the system I have in mind most of the time is that of Judaism, which I know more intimately than Christianity or Islam). We will return to these systems at length in some of the discussions below.

Therefore, when we speak about $h(\mu)$,the community of the adopters of μ, we are not speaking about those who actually accept as true only the data transmitted by μ, but rather those who take μ as their ideal system.

This has important implications. First, all the real systems of a given cultural community are similar to one another, even though they are not identical. Second, but no less important, members of the same cultural community can at least argue with one another and try to persuade one another about various issues, which is not necessarily the case for members of different cultural communities.

We can find a gap between the real system and the ideal one in the personal sphere as well. Take, for instance, a person who consciously adopts sources that are slightly different from those of the cultural system in which he lives, but subconsciously still accepts data from that system. This is an example of "misidentification of the source", and, in practice, opens a gap between the person's ideal system and his real one. Here the gap is not sociological (unless the ideal system is that of a whole community, as described above) but rather psychological.

I would like to expand briefly on this last point. A transmission event can be looked at from either the epistemological or the psychological viewpoint (the latter being relevant to the pragmatist line of argumentation). The epistemological viewpoint looks at the datum as cognitive material "claiming" to be true and therefore considering itself an object for belief. In contrast, the psychological viewpoint looks at the transmission as an event occurring in time and sometimes even in space, under particular external and mental circumstances. One of the psychological aspects is the question of whether the subject is aware of the source that has transmitted the datum to him. To be sure, the speaking self cannot always identify this source, whether because he failed to make note of it at the time when the transmission occurred, or because he forgot it afterwards even though he did identify it at the time of transmission. Nevertheless, we must bear in mind that the identification of a source is also a datum, generally derived through introspection, and so the epistemological discussion is relevant for it as well. And even more importantly, it has far-reaching epistemic implications, especially when the misidentification of the source replaces a source that has been adopted by the speaking self (on the ideal plane) by a source that has not been so adopted. Such misidentification is, as mentioned, one of the main reasons for the gap between an individual's and even a society's ideal and real systems.

This requires a new understanding of the concept of truth. We saw above that truth in Source Theory depends on the source – that is, it is limited to the given system. Any logic-bound system can serve as a criterion for truth, which is what leads to the nihilistic absurdities. In a psychosocial system, however, where ideal systems are distinguished from real ones, the truth of a datum is tested by its fit with an ideal rather than a real system.

On the one hand, there are **real systems** used by actual individuals or societies, in which undesirable sources and limitations are involved in the activation of desirable sources. On the other hand, there are **ideal systems**, which are free of these defects – systems of the logical sort described in the previous chapter. We can imagine such a system by once again using the metaphor of the computer. We imagine a sophisticated computer that knows how to filter the data received from the basic sources of the system, according to the proper division of labor prescribed by the source model of that system, and receives *all* the relevant data from those sources. This is a system in which the sources are activated purely and fully, so its data are unambiguous and absolute by the criteria of that system. We all know that such a system is impossible in practice, especially since our thinking in almost all areas of life occurs without careful attention to sources and the division of labor among them. This creates a gap between the various individuals who belong to the same system in principle. As mentioned, these differences are often described in common parlance as differences in ways of thinking, which lead to differences in the content of thoughts about the world.

We are therefore trying to attain a more exact understanding of the notion of **defeasibility**, which is becoming more and more prominent in modern logic, in particular in nonmonotonic logics. This concept is an outgrowth of the gap between real and ideal systems. Ideal systems work in a utopian situation in which all data included in a system are justified by all the system's model, which on its part operates the system's division of labor and makes use of all the data transmitted by the sources. This is not the case in real systems, either because the sources do not transmit all their data at once, or because the system's activators do not always act according to the rules of ideal systems. The first problem should be called **transmission failure**, while the second might be called **operation failure**. In either case, ordinary systems generally have mechanisms for fixing the problems, which is always done by adding more data – whether new data transmitted by the sources some time later regarding the essential data in question or new data about the way the sources acted in the past (that is, reflective data), which can help us understand the operation failure. In Source Theory terms, we can say that the repair process occurs when new data from sources adopted by the system (or data that seem to be transmitted by such sources) are added, whether they pertain to the issue under discussion or to a faulty use of such sources in the past, from the viewpoint of the requirements of an ideal system. The real system aspires to operate as an ideal system, and the constant repairs that are supposed to advance it toward this goal make it defeasible.

The difference between logical systems and (real) cultural systems

What is the difference between the two types of systems? The ideal system of a community is often very close to a logical system, while real systems are quite different from logical ones. First of all, a real cultural system is a dynamic entity, as opposed to a logical system, which is essentially a-temporal. The dynamism of a real system may be manifested in several aspects, three of which are discussed here: These are the system's **defeasibility, openness** and **detachability**. We will present some examples each of these aspects, which are not meant to be historically exact, but only to illustrate the ideas.

Defeasibility. One of the manifestations of the dynamism of a system is its defeasibility, but this feature can also be part of a logical system, since modern logic has developed a formalism for this phenomenon.

A good example of this process is the development of modern science, which is a subsystem of WRS. The process of self-correction in science stems from the fact that a real scientific system cannot operate according to the requirements of the ideal WRS. Data are received by human beings (that is, by individual system users), who do not have all the relevant data at any given time (due to transmission failures) and sometimes make mistakes in drawing conclusions from the existing data, as they do not always draw their conclusions according to the requirements of the consistency mechanisms of ideal systems (operation failures). But since this system is defeasible, adding new data enables it to correct itself, and it has indeed done so in the historical process of scientific development, even though this process itself is not free of errors.

Openness. Logical systems are basically closed ones. In contrast, real cultural systems are open ones, with windows to the outside. They are influenced by other systems, due to social, cultural or political circumstances. A cultural system (i.e., its activators) may accept *data* from the outside, without adopting the sources that transmitted them, and anchor them in its own sources, while at other times it opens itself up to *sources* that are not part of its ideal system. Its division of labor may change as a result of the penetration of external sources and data.

Now let us consider these two possible situations from the logical point of view. When a subject transmits data transmitted by a source other than its basic sources we would say that, from the pure logical perspective, he actually adopted that alien source without being aware of that adoption. If he was not aware of that source, as often happens, this should be categorized as misidentification of a source. This is even more true if the subject attributed these data to one or more of his basic sources. Basically, all of this is also true in the psychosocial perspective, but with a small difference: The system activator may find a way to anchor the "imported" data in one of the system's basic sources and thus turn them into authentic data of the system. Of course, sometimes this anchoring is artificial and wrong, and then the true source remains the

outside source, but sometimes the outside source is only a stimulus that pushes the activator to find a source for a data that could really have been transmitted by the internal sources of the system, and thus bring its transmission from the potential to the actual.

And what about the case of adding a new source to the system? From the pure logical perspective, this would definitely mean creating a new system and discarding the previous one. Systems are defined by their sources, and different sources create a different system. From the psychosocial perspective, however, we recognize from the outset that there is a gap between the ideal system and the real system, and the infiltration of new sources can just as well be a part of this gap. Indeed, from a logical point of view, the ideal and the real systems are two different systems, but from the psychosocial perspective, we cannot ignore the fact that the activators of the real system see the ideal system as their desired objective and wish to bring the real system as close as possible to that objective. Sometimes, though, the infiltration of the new source becomes so prominent that it actually reshapes the whole character of the system. Then we can certainly expect that the change will not stop with the real system, but will also reach the ideal system. In such a case, we will indeed be able to say that the system is altogether a different one, from the psychosocial perspective as well.

There are countless examples of these phenomena, but a particularly radical example is the cultural syncretism that occurred in broad areas of the Roman Empire in its later stages. This syncretism was created in a process by which the dominant, Hellenistic-Roman culture was influenced by the nations conquered by the empire, particularly those to the east. The cultural system that was created in that period was a new one that included not only new data, but also sources that were different from those on which the absorbing culture has been based. These infiltrations certainly changed the real cultural system of the Empire. Did they change its ideal system as well? We cannot tell for sure, and we must leave the question for historians to answer.

Detachability. Sometimes a particular system starts out as a subsystem of a larger one, but after a while it becomes an independent system. This situation should be called the detachment of the system. It often occurs when the activators of the subsystem become aware that the differences between their real system and that of other members of the larger community are too great, or that the differences are not only in their real systems but also in their ideal systems. However, in some cases the activators of the new system are not aware of the detachment, or otherwise deny it, and keep presenting it as a part of the mother system. We can describe it as follows: Suppose we have a system $S(m22)$ whose basic model is $m22$. Now b comes along and says that she adopts $m22$, and that $m22$ transmits, among other data, a set of data P. In this case b believes that P in virtue of $m22$. Now suppose that a adds new data to the system (as part of its defeasibility), and these data are in contradiction with P, or that other activators of $S(m22)$ say that $m22$ does not transmit P. In this case, b may wish to establish

P as a system in and of itself, which we will call S(b), but keep presenting it as part of S(m22), namely, transmitting that S(b)⊆S(m22).

There are several examples of this sort of process. Let us take Frazer's theory about the development of magic, religion and science as a basis for our discussion (without taking a stand regarding its actual veracity). Roughly, according to this theory, in the beginning there was magic. Magic was a pseudo-science, based on a wrong conception of the laws of nature but embracing the essential naturalist idea that the world acts in some fixed physical order. When the wrong conceptions failed, and people were unsuccessful in mastering the world through them, they developed the conception of "superior powers", and hence of deities and religions. In other words, magic was "rational" in the sense of being founded on the basic cognitive tools, but since it failed to work – according to the tests of these sources themselves– it was discarded (a rational move in itself) and people developed the concept of a deity. Deities, however, were not bound to the natural order (Frazer, 1951, Volume 1, Chapter 4). If we continue Frazer's story, we can add that acquiring data about and from these supernatural entities required supernatural capacities (prophecy), and these data were thus transmitted by a supernatural source. The adoption of that source changed the mother system, which from now on was no longer founded on the basic cognitive tools alone, and eventually the new system had to be detached from the old one. The culmination of this process was the medieval recognition of religion's irrational character, embodied in expressions like "*credo quia absurdum est*".

Another example is late Communist thought. The original Marxist theory was considered a subsystem of WRS, and its sources were the basic cognitive tools. However, when the reality perceived by these cognitive tools contradicted the theory, it started using explanations that rejected reality. The theory's basic texts became canons, and Communist scholars claimed that it was not the Marxist theorists who were wrong, but rather reality that needed to be re-explained. Some theorists consider this a process in which Marxism was turned into a religion, but we can use the terminology of Source Theory to describe the process as the detachment of a subsystem from the main system so as to become independent. This process, in contrast to the previous one, was never acknowledged by its bearers, and Communist theoreticians kept seeing their doctrine as perfectly rational and strove to re-explain the reality conceived by the basic cognitive tools as a realization of it.

In fact, religion was not alien to that denial, either. In the Middle Ages, a school of religious rationalism developed, claiming that not only does revelation not contradict reason, but it can even be proven within a rational system. Although these two developments were quite different, we can learn something from both of them. Often, when a new system is detached from the original one, it is still considered as belonging to the original system (in the case of religious rationalism, only a few philosophers were involved, but in the case

of late Communism all of them were). This is evidence that people who claim to continue to belong to the old system while being active in the new one continue to consider the original system to be their ideal one, even though their real system has become greatly distanced from it. From this viewpoint, the religious rationalists and the late Communists continued to be part of the same community – the community of the adopters of the basic cognitive tools – since, at least on the surface, they were still able to use purportedly rational means in their arguments.

A third example is the detachment of Christianity from Judaism. Jesus and his Disciples undoubtedly lived within the Jewish religious system. One of their truth sources was the Jewish Bible, and other sources were, at least in some compartmentalized manner, some of the interpretive texts that are called the "Oral Torah" (which had not yet been written down at that time), that later served as the basis for the Talmud. Early Christianity considered itself a subsystem of this Jewish system. Gradually, under the active influence of Paul, the Christian subsystem detached itself from Judaism and became an independent system. Here we see a similar tendency to that discussed in the previous examples: Christian theologians throughout the centuries have tried to show that the Jewish Bible predicts Jesus's advent and even "authorizes" him to spread his new teachings. In parallel, the Rabbinic stream of Judaism searched the Jewish Bible (primarily the Five Books of Moses) for sources that authorized the Oral Torah scholars to re-interpret the Bible and even to issue new commandments. From this standpoint, both Christianity and Judaism see themselves as belonging to the same ideal system. Indeed, during the centuries in which there were religious debates between Jews and Christians, they centered mainly on the question of which interpretation of the Jewish Bible is the correct one. But then do Judaism and Christianity really belong to the same cultural community? It is hard to say that they do, even on the ideal level; although it is accepted nowadays to speak about the "Judeo-Christian tradition", it seems that once the Jews and the Christians each adopted their own canonical texts – the Jews adopting the Talmudic literature and the Christians the New Testament – the two systems became totally detached from each other, even on the level of their ideal systems, and the Jewish Bible was no longer the primary source for either of them. This is the case because each system determines the correct interpretation of the Jewish Bible according to its new truth sources, which the Bible itself is supposed to have authorized. This has created a situation in which the two systems have been constructed on different types of indirect adoption. In both systems, the primary source is the revealed Word of God (some see it as a particular form of "testimony"; Wahlberg 2014), and the secondary source, which transmits the Word of God, is the Jewish Bible, but each of them has a different tertiary source that transmits the content of this Bible. In Judaism this is the Talmud and the literature that has been developed around it, while in Christianity this is the New Testament and the literature that has developed

around it. The canonization of the sacred texts has therefore become the crucial point of departure between the two traditions (for a philosophical analysis of canonization in terms of sources – of authority as well as knowledge – see Halbertal 1997, Chapter 1). It would thus seem that the two systems are detached even on the ideal plane, although this is not totally certain.

If we accept the argument that Judaism and Christianity have become detached systems even on the ideal level, what can we say about the relation between the Catholic and Protestant versions of Christianity? Catholicism has developed a system in which there are a number of sources, in addition to the New Testament, that mediate between God, the primary source, and the individual believer: the Church, the Church fathers, the popes, and the ecclesiastical institutions. Protestantism has rejected these intermediate sources, claiming that only the Bible itself – including the Old and the New Testaments – is the source of truth. Does this turn the two forms of Christianity into distinct systems, even on the ideal plane?

At this point a fourth-degree source is added to the controversy. In cases of this sort we can say that the greater the ordinality of the mediating source, the closer the systems are, on an essential plane. Even in this case, however, I believe that historical reality has turned the Catholic and the Protestant traditions into two separate cultural systems, although it seems that on the level of their ideal system they share the same aspiration to achieve the truth through the same sources. Therefore, it seems preferable to see them as opposing subsystems of the same inclusive system, although this too is not totally certain.

Islam presents us with a more complicated challenge. Mohammed declared that his revelation was a continuation of those of Moses and Jesus, but he claimed that the holy scriptures of those revelations were forged by the Jews at later times and that the original version, which had been lost, was revealed to him anew by the angel Gabriel. This seems at first glance to be an attempt to rely on the same ideal system, but in this case it is quite clear that the systems do not actually have much in common, since the ideal source for both Jews and Christians is the Bible, while the Muslims reject this text. If we consider a system's sources to be existing objects that transmit data, then two different texts cannot be seen as different forms of the same source, even if both of them purport to be transmitting the primary source that they have in common – namely, the Word of God as transmitted in a revelation. (One could also discuss the question of whether the God of these systems is the same God, but we will leave this for another occasion.) While Christianity and Judaism are divided on the level of their tertiary source, both of them disagree with Islam on the level of their secondary source. Thus the detachment between them and Islam is more basic than that between the two of them. This is noteworthy because the usual view (from the standpoint of the essential articles of faith and the major commandments) considers Judaism to be more similar to Islam than to

Christianity. While this is indeed true on the level of the data of the cultural systems of Judaism and Islam, it is not true on the level of the sources, which is what determines the identity of a system.

The individual's connection with the system: availability and convertibility

All the aspects discussed in the previous section involve dynamic processes within and among systems, but an equally important issue is the individual's psychological **connection** (or **attachment**) to the system. When we discuss logical systems, we have no expectation that people using a system will have any sort of psychological connection with it. The computer metaphor is useful here: The sources on which the systems are based are impersonal, receiving input and emitting output. Even the speaking self, which is the subject using the system, is nothing but an abstract entity without a history or personal traits, who can change and can actually be just about anyone. In contrast, people's connection with their cultural system is a psychological and social phenomenon involving the people and their culture, the participants in the system under discussion. A person who has a psychological connection to a system not only activates its sources in the technical manner, but also "feels at home" with its data, understands its nuances and implications, and can internalize it as a "way of thinking". In fact, there are different degrees of connection, some stronger and some weaker, which cannot be precisely quantified (although I suggest a way of doing so in the next section). At any rate, people's connection with their system, whether personal or cultural, is an intimate linkage that goes beyond the mere operation of the system. This linkage ensures the **availability** of the system to the adopter, in the sense I will analyze below (note: that availability should not be confused with accessibility, in the sense attached to it in contemporary epistemology).

This point is very important in light of the second nihilistic absurdity, which states that the adoption of any source is arbitrary. If this is the case, then it would seem that any individual could adopt any source she pleases and change it whenever she wants. But in practice this is not the case. First, most people grow up within a particular system, including its basic sources, and only rarely does a person replace it with another one. Second, when people adopt a new model of sources, they also need a long psychological process to acquire the ability to use it, and in general they are not aware of the identity of their sources or the division of labor among them. Therefore it would be difficult for them to make use of a different system, as this requires understanding another culture. Even when a person does decide to replace her original system with a new one, as in the case of religious or secular conversion, she may very often find it difficult to master the newly adopted sources of that system.

The first change of systems we all experience occurs during childhood. When children begin to learn about the world, their main sources are their senses and their parents, where the latter are actually secondary sources transmitted to the child by her senses. However, children gradually detach themselves from these sources and adopt the basic sources of the cultural system in which they live. Although parents, like other reliable witnesses, may continue to serve as sources within the new system, they lose their priority in the hierarchy in favor of other sources, such as the child's own reason, teachers, books and other media. This process is part of children's socialization into their cultural community. Nevertheless, this is not a real change of systems, since both the children and the parents belong to the same cultural community, and thus share the same ideal system. Moreover, normal parents train their children to disconnect themselves from their immature system and adopt the sources of the cultural system for themselves.

This learning process, like others, takes place backwards from a philosophical point of view. Children first receive data as content, and only later become more or less aware of their sources and learn to distinguish among them. This process resembles the acquisition of language: The child first learns to speak, and only later, when he studies grammar, does he become aware of the regularities in language. Similarly, in the context of Source Theory, only people who have studied philosophy or the cognitive sciences are likely to achieve the final stage, in which they perceive these sources as bases of a general system, and even become aware of the division of labor among them within this system. Accordingly, the process of adopting sources also occurs backwards. First the subject believes the data, and only afterwards does she justify her belief by referring to its sources. To be precise, first she accepts the data from the mediating sources, and then she either anchors the same data in the mediated sources, the basic sources of the system, or discards them as contradictory to those sources. When she accepts these data, at least some of them have already been established in her cultural community in the form of tradition. Thus, systems are not "chosen" out of free will, and certainly not in a *tabula rasa* condition. When a person adopts the basic sources of a system consciously, this occurs only after she has already adopted them unconsciously, and, more importantly, after she has already developed a psychological connection to the system.

As mentioned, the change of systems that occurs when children grow up is not a true change, since it merely replaces one real system with another belonging to the same ideal system. However, some people actually do replace their system with a totally different one. *Prima facie*, such a conversion ought to be impossible. When a person begins to criticize his existing system, he still thinks within this very system; and as each system contains a self-adoption axiom with which it confirms its own data, how can anyone manage to escape the internal viewpoint of the system in which he thinks? This question becomes even more interesting when entire cultures disappear as the result of system

conversion. How, for example, did millions of people leave the pagan system of the Roman Empire and adopt the sources of the Christian system instead? Nevertheless, we will keep the focus on the individual level, since the really big cultural transformations are made up of a large number of individual ones.

It would seem that people begin to criticize the system they were brought up in when they become aware of the gaps between the ideal and the real system. But since the average person cannot distinguish between the two levels of their cultural system, they see this gap as a problem with the system as a whole, and therefore look for another system to replace it with. Sometimes the crisis does indeed stem from an internal fallacy that lies in the very basis of the ideal system, such as a contradiction between some of its elements. Although it is hard to imagine that anyone has ever abandoned WRS because of the paradoxes that were discovered in modern mathematics or the uncertainty principle in physics, I think it is quite likely that these problems have contributed to the general public impression that the data of this system are not as absolute as they had seemed before, thus making it easier for people to abandon it. Whether or not this is the case, people who replace their system with another one begin the process with data coming from the original system. There simply is no other system they can use, since they have only the data of this system, and it is the one in which they think. For example, if Western youth "search for the truth" in India and convert to Buddhism, they begin their search with ideas they acquired in WRS, such as relativism, the aspiration for "spirituality" as a form of self-realization, openness to the other, and the romanticization of the Orient – all parts of WRS and its internal contradictions.

Often a person who has converted from one system to another tries to explain – that is, justify – his act, and he may even try to convince his interlocutor to follow in his footsteps. At first glance, this request is pointless, since we have seen that the adoption of a system is an arbitrary act that cannot be justified logically. In practice, however, we find that people who have undergone a conversion do indeed try to explain their actions. Here there are a number of possibilities. One is that the person explains his actions in purely subjective, personal terms; however, such an explanation is causal and not justificatory. A second possibility is that the person explains his actions in terms of the system he has abandoned, but this is obviously illogical, since this system includes the self-adoption axiom, which denies any justification for conversion. A third possibility is that the person justifies his conversion with data that are shared by both the system he has abandoned and the new one whose sources he has adopted. In general, data of this sort do indeed exist. Sometimes these data have been transmitted by different sources that attain a coincidental accord, and sometimes by sources common to the two systems. Moreover, sometimes a commonality of this sort (whether of the data or of the sources) stems from the influence of one of the systems on the other. In any case, the commonality of the data is a reasonable basis for a justification of this sort. Nevertheless,

the commonality of the data is coincidental. As we have seen, the essential identity of the system, and therefore its essential degree of closeness to other systems, is determined by the degree of commonality of the sources rather than that of the data. An attempt at persuasion which is based on data and ignores the sources on which the different systems are constructed cannot succeed without making the mistake of equating the sources, whether or not this is done intentionally.

Another important point is that almost all the cultural systems in existence today are basically quite similar to one another. All of them seem to give a major role to the basic cognitive tools (the senses, introspection, abstraction, reason, the understanding and the like) as their fundamental sources of truth. The division of labor among them is often different, but at times even that is quite similar. This commonality, which might seem strange if we consider the great differences and disputes among the various systems, undoubtedly stems from the fact that these are, after all, the basic human cognitive tools, so we could expect that many human beings would tend to use all of them.

The main difference among the systems is generally their other sources, especially of the type known as testimony. There are some systems that rely on a particular text and its accepted commentators, while others rely on a different text and/or different commentators, and yet others do not rely on texts at all but only on other people. Since such testimony is a mediating source, as explained above, it too is received through the basic cognitive tools (this, however, does not give the basic cognitive tools any supremacy over the witnesses themselves, because the *justification* of the former is not prior to that of the latter, as demonstrated in Chapter Three). An imaginary system of the sort I described above – like the one that finds out about the weather in Tokyo by assessing the odors I detect where I live – does not exist, although there are indeed systems with magical elements that come somewhat close to it. To be sure, experience shows that people usually convert to a system that is similar to their original one. It would be extremely unlikely to find a person in our times who had, for example, converted from WRS to a magical pagan system of the sort that can still be found among some African native tribes or a person who converted from Jewish or Christian faith to that of the Australian aboriginals. Indeed, there have been quite a few Western anthropologists who tried to get inside the heads of the members of these cultures, but this was not because they wanted to personally adopt these cultures' sources, but only to be able to describe them properly for the purposes of their research, which was done with the tools of WRS. The lack of conversions of this sort does not stem only from the psychological difficulty they would pose, but also from the logical difficulty due to the great gap between the cultures in the identity of their sources and the division of labor among them. The essential logical difficulty is the same, however, even when the cultures involved are apparently much closer, and only the large amount of common data, together with the fallacy of equating the

sources, enables the convert to ignore the distance involved in the transition from one system to another.

Moreover, any system that will ever be created has its source in human beings. I am not speaking only about existing systems, but also about possible ones, if they are to be workable. If we consider, for example, the possibility that I will develop an imaginary system in which my kitchen table tells me everything I need to know about the world, I am the one who will develop it and I am the one who will receive its data, using my basic cognitive tools. But even if I develop a system that is closer to a pure logical one, whose data are provided by computers and received by computers, and for which computers are the "speaking selves", it will still be a human being who builds the computers and programs their software, since the system represents a way of thinking, which is created (whether intentionally or not) by people who think with that system. And even if they are searching for alternatives to the way they think, they construct these alternatives as changes in the way they think. This shows that there cannot be a system that is entirely detached from human beings or from the culture in which it is constructed and the people who feel a psychological attachment to it.

The psychological connection between a person and a system is not necessarily exclusive. One can have such a connection to two systems, and perhaps even three or more. Sometimes this stems from changes in an individual's life. We can imagine a person who grew up in a traditional Muslim society and immigrated to a Western country, where he discovered Western culture and adopted it without detaching himself from his original one. We can imagine more than this. Within Western culture itself there are quite a few cultural enclaves of minority groups that could not or would not assimilate within the majority culture. These minorities are undoubtedly aware of the majority culture; they take part in it and are influenced by it to one degree or another. Nevertheless, most people in these groups do not cross the line by converting to the majority culture, but continue to maintain their connection with the minority's cultural system. Such people are capable of conversing with members of the majority culture and carrying on a dialogue in the terms of that cultural system. These people are thus using two systems, both of which they adopt with some degree of psychological attachment. This situation can clearly lead to internal conflicts, which I discuss below.

As mentioned, people can have different degrees of psychological attachment to their systems, which cannot be precisely quantified. This is important when a person's connection to two or more systems is involved. The person can have a weaker attachment to one system and a stronger attachment to the other one. Does this difference affect her ability to utilize the two systems? Since we have stated that it is the psychological attachment that makes it possible to use a system, the answer to this question must be affirmative. The difference, however, is only one of degree. In general, the determining criterion is the strength of

the attachment. If we assume that there is a minimum degree of attachment required to use a system, then the determining factor is whether the individual's attachment is at or above this minimum. If the person's attachment is above the minimum in both systems, then she can, in principle, use both of them with a reasonable degree of proficiency.

While the greatest degree of psychological attachment is complete psychological adoption of a system, the lowest degree is unrealized availability. A cultural system is available to anyone in close proximity to it (geographically or sometimes even culturally), and this availability is considered unrealized if this person does not adopt the sources of the system at all or adopts them in a partial way that emits only a very limited set of its data. Although such people have not adopted the sources that are available to them, they are nevertheless aware of them and are therefore more able to adopt them than they are able to adopt the sources of some distant cultural system. Moreover, even within their own culture, if people adopt the sources of a close culture, they are considered to have undergone a conversion of some sort, while if they adopt the sources of a very distant system (for example, if people in contemporary Western culture adopt the sources of a pagan system) they are considered mentally ill (indeed, some mental illnesses are nothing but individual systems that are defined as illnesses because they are so distant from the general cultural system). Psychologically, the availability of a system makes it easier to convert to that system than to an alien one to which the individual does not have any psychological connection whatsoever. This is why such a weak connection nevertheless deserves to be considered a type of psychological connection, albeit of the lowest degree.

The individual's connection with the data: technical belief and vivid belief

People's psychological connection to a system is not restricted to their attitude towards the sources of the system or the system as a whole, but also includes their attitude towards particular data within the system. In the epistemic realm, this is the phenomenon of **belief** in data.

A person believes the data that are transmitted to him by sources he has adopted. However, he may have different types of psychological attitudes to different data. There are some data that he believes only because they have been justified in virtue of having been transmitted by one or some of the system's sources, while there are others that he believes almost instinctively. The data of the first sort are acquired through the (more or less) conscious operation of the system sources, while the data of the second sort are perceived as inherent within the subject, and thus as obviously true. Thus various degrees of **belief strength** are involved here. The first type of psychological attitude to data will be called **technical belief**, while the second type will be called **vivid belief**. To

be sure, this is not a sharp dichotomy, since the distinction is unquantifiable and there is a whole range of intermediate degrees of belief between the two poles.

Consider an example from WRS. People believe in what *they* have seen themselves, and they believe *their* parents' reports about what *they* have seen. It is clear, however, that the strength of their belief in the former type of data is stronger than that of their belief in the latter type. In such a case, the difference in strength can be attributed to the hierarchy of truth sources in the cultural system, but there are other causes of such differences. Clearly people using this system believe that $2+2 = 4$, and they also believe that $2,354+2,453 = 4,807$. However, their belief in the first datum is stronger than their belief in the second. They automatically accept that the first one is true, while the latter requires a conscious act of calculation. This is no longer a matter of placement in the hierarchy of a cultural system; at most it may be considered placement in a personal hierarchy.

The strength of a person's belief is determined largely by habit, conventions, emotions and the like. These function to save the person the need to actively employ sources as they provide the data immediately, directly, and intuitively. This makes the data very powerful in the individual's personal world, even though the requirements of the cultural system – certainly the ideal one, but also the real one – do not give them any advantage over weaker data. The issue of the strength of data is thus purely psychological, having nothing to do with the system's function as a tool for finding the truth. Nevertheless, it is important to discover the strength of data so as to understand this phenomenon and try to prevent it from influencing the functioning of the system itself.

This issue is also important for people's psychological connection to their system. Even though the degree of this connection cannot be quantified, the strength of people's beliefs can nevertheless give us some quantitative indication of it. This can be described as follows: The degree of a person's psychological connection to a system is determined by the ratio between the amount of data in the system in which the person has a vivid belief and the entire amount of data that the system has provided him. This criterion is especially important when the person has a psychological attachment to two or more systems. If the ratio of the person's vivid beliefs in one system is greater than that in the other(s), then the person's psychological attachment to the first system is greater than his attachment to the other(s).

To be sure, a person can make use of a system (or subsystem) even with only minimal psychological attachment to it, but this use is limited in both scope and strength. The best example of this is a work of literature. Logicians have sometimes discussed this issue using the term "domain", which is explained by Source Theory as a sort of subsystem (or maybe even a system) distinguished from a larger system to isolate the discussion about it from other issues within that system. The text of a literary work is a subsystem that transmits data and

can therefore be defined as a source of the testimony type. That is, the data are transmitted to us through mediated "adoption" in which our basic cognitive tools transmit what the text says. To get into the frame of mind of the story, we have to read it as if we believe what it says, and this enables us to create a type of psychological connection with the text. Sometimes this connection is quite strong, especially when we identify with the hero, "hate" the anti-hero, and the like, but we are always aware, at some level of consciousness, that the story is not true and does not even purport to be true. "The suspension of disbelief " – i.e., the temporary subordination of the person's generally adopted sources to that of the literary work – is only "for the moment", as Coleridge noted (Coleridge 1939, II: 5–6; compare Frege 1979:129–130). Even though there is a psychological connection in such cases, it is only *ad hoc*, and is of limited strength. Its range is also limited, since it involves only the data transmitted by the text itself. Generally we are not interested in knowing more about the characters than what the text provides us with, and even professional commentators do not attempt to use the text to find out things about the world, but at most to discover something about the text's (or its author's) view of the world. To be sure, covert assumptions about the world in which the plot unfolds do often appear in the text. For example, readers of Greek mythology have to take on a worldview in which miracles are possible, while readers of Orwell's *1984* are presented with a world in which miracles do not occur because everything is supposed to take place according to the laws of modern physics. If, however, Orwell had surprised us by introducing a miracle into the novel, we could not refute this datum, because the book is a subsystem in which the text is the supreme source in the hierarchy, while our cognitive tools are being used only as mediating sources for understanding the text. At most, we could express our reservations about the author's distasteful choice, but this has nothing to do with the truth value we ascribe to what we read.

In the margins of this discussion we can address a question that has disturbed modern literary scholars, which can be rephrased in terms of Source Theory: What is the source of a literary work, the author or the text? We cannot decide this question unambiguously, but we can explicate the arguments of the two sides more precisely. On the one hand, it is obvious that the text is the source. If we want to know what happened in Orwell's *1984*, we read the book rather than ask Orwell. Moreover, *1984* and *Animal Farm* do not share the same general system, even though they were written by the same author. For example, pigs can talk in *Animal Farm*, while this would be impossible in *1984*. Since every system (or subsystem) is determined by its sources, we must conclude that each of these books is an independent subsystem, detached from the author. These observations support the stand of those scholars who believe that literary works should be detached from their authors. However, it is also clear that we cannot understand such works without interpretive tools. It is hard, for example, to see how to understand the intent of *Animal Farm* without knowing its historical

context. The book's anti-Communist message is the author's message, which can be understood even better if it is combined with the similar message of *1984* as well as Orwell's own experience as a disappointed Communist. It seems to me that most of the literary scholars involved in the dispute would agree to this. Thus it is now possible to reduce the controversy between the two sides to a question of the hierarchy of the sources: What should be the division of labor between the sources of the text itself and the sources that help us interpret it (on the basis of background data connected with the author and his other essays)? Once again, my purpose is not to decide this dilemma but rather to explicate it.

Pragmatic guidelines: the adoption of a system as a practical issue

We have discovered that workable systems are those that exist as cultural systems, so that the people who use them have a psychological attachment to them. Logical systems exist only on a theoretical plane. Although they do have considerable importance, especially since the ideal system of a culture is fairly close to a logical system, their importance is not in the realm of practice. In the latter realm, every system depends on the people who create and develop it. After all, each system represents a human way of thinking.

People do not operate in a vacuum. There are no human beings who were born and grew up outside of any cultural system, and who were allowed to choose some system when they were old enough. Each person is born into and grows up in a particular cultural system, which she adopts by virtue of the circumstances of her birth and upbringing, without conscious choice. We will call this system the person's **native system**. A person's connection to her native system is a fact of life; the most she can have is the opportunity to convert to another system if she is unsatisfied with the first one. Conversion as well cannot be justified in a non-arbitrary manner, and it too can be explained only by psychosocial causes, not logical justifications. A person's ability to justify her attachment to a particular cultural system rather than another one is logically no different from the ability of any other person, who was born into a different system, to justify his own attachment to that system.

From a broader perspective, we can say that our formalist line of argumentation has led us to a situation in which we are faced with an infinite number of systems, each of which can be justified equally. The pragmatist line of argumentation limits the variety of systems to a finite number, by basing them only on existing cultural systems, but it does not affect our ability to justify any one of them more than any other.

These observations inevitably lead to a relativistic conclusion. I do not deny this, despite the unfavorable connation the term "relativistic" has in many circles. I merely insist that without the pragmatist argument we would be left with the logical one, whose conclusions are not merely relativistic but actually

nihilistic. Relativism is still much better than nihilism. Nihilism leads to a situation in which any datum can be justified, meaning that no datum can be justified. In such a case we cannot believe anything, and so it is impossible to think at all. Relativism, in contrast, leads us to a situation in which belief is at least possible, even if it impossible to justify belief in a specific datum coming from one cultural system more than a contradictory datum taken from another one. Relativism thus allows us to think, even if it requires us to be aware of the conditional validity of our thoughts.

I do not consider it necessary to search for a way to overcome or "refute" relativism at any cost. Such a search, which first shoots the arrow and then draws the target, does not demonstrate intellectual honesty. Instead of trying to refute relativism we should elucidate it and explain how to find our way within it. Here too, since we cannot adopt a logical method of doing this, we have to look for a pragmatic method. Such a method will not have the crushing conviction of logical argumentation, but I think it will make sense. We will do it in the form of guidelines for the adoption of a system.

Before presenting these pragmatic guidelines, let us remind ourselves of the point I made earlier, that the adoption of sources is not necessarily a voluntary act, and sometimes it is not even conscious, but even in such cases it is still an **act**. Therefore it can be investigated as part of normative discourse (compare Pollock 1986, Chapter 5; Armstrong 1973: 166). The list of pragmatic guidelines I present below belongs to this sort of discourse. Indeed, since this discourse itself can only be held within a given system, it involves the same problem of circularity and arbitrariness discussed above. However, this normative discourse is not meant to determine fixed truths (in this context, normative truths), but only to make it possible to offer tentative suggestions based on ways of behaving that are common to most of us in most of the systems that are available to us. Following Schopenhauer and Wittgenstein, I have compared the formalist line of argumentation to a ladder which allows us to raise ourselves above the system in which the discussion is being held and see the various systems as if from above, and which we can throw away after we have used it. Here, in contrast, I am suggesting that we take the ladder back and use it to come down again, even if it is no longer standing on firm ground. After all, the refusal to adopt sources is also an act, and every act that involves the adoption of sources – whether we adopt basic sources of one system or another, or refuse to adopt any of them at all – is still an act, and so is subject to normative judgment. Thus, in no case can we escape the need to act. In light of this, it is best that we should at least be aware of the way we adopt sources and try to do so according to the most prudent considerations, even if they are drawn from a given system or systems and are therefore true only in these systems. The pragmatic guidelines are thus a collection of good recommendations, and are worth listening to even if they cannot be justified in all possible systems.

The essence of the pragmatic guidelines can be summarized in the following principle, which we shall call **the principle of the purest utilization**: A

person should utilize all the systems he is capable of utilizing, and only those systems. This principle is not equivalent to the basic tenet of pragmatism, "True is what works", but is a derivative of that tenet or, in fact, its application to the particular question of choosing a truth system. This principle leads to more concrete guidelines, which I call the conservative rule, the separation rule and the exhaustiveness rule.

The conservative rule: **A person should stay with his native system unless he can no longer maintain it.** Although the particular culture that people are born into and raised in is arbitrary, it is a given fact, and since converting to a different system is no more justifiable than remaining in one's present system, the pragmatic line of thought implies that people should stay in the system they are already in, for two reasons: (1) *Semper necessitas probandi incumbit ei qui agit* ("The necessity of proof always lies with the person who lays charges", i.e., who seeks to change the existing situation); (2) it is hard to develop an attachment to a new system, and even with a great deal of effort it is not always successful.

This rule does not apply when a person feels that she can no longer employ her native system. Such a situation can occur for either logical reasons or personal reasons, or both. Logical problems may arise when a flaw is discovered in the system or when the self-adoption axiom of that system does not hold, i.e., when the system itself does not claim that all its data are true. Personal alienation from a system may occur when an individual, for whatever reason, no longer feels a real psychological attachment to it. The conservative rule is not meant for such cases; it applies mainly to people who are considering converting to a new system only for reasons of relativism, curiosity, adventure, and the like. The rule does not apply to people who want to add another system that is available to them without abandoning their native system. This leads us to the second rule.

The separation rule: A person who has two or more native systems should keep them all without trying to combine them. It is indeed possible for a person to be raised within two or more systems. People have a psychological tendency to try to combine the two systems into one, to avoid compartmentalization. This tendency is legitimate on the level of one's own personal system, but it is not justified by any existing cultural system. According to the pragmatist line of argumentation we are using, such a combination is flawed, as one should adopt only existing cultural systems in their entirety (since, as shown above, only existing cultural systems are workable). Moreover, such a dual personal system would not have a counterpart ideal system, creating a situation in which the first nihilistic absurdity is even stronger.

The best way out of this dilemma is for people to hold their two native systems in parallel. This means that they should think according to the two systems at the same time, but separately. If they have a question for which they need an answer, they can use both systems separately as if they were two different

computer programs. At the end of the process they can say that system A provides one answer and system B provides another. There is no need to decide between them (according to the theorem of the undecidedness of the speaking self). This way they can be loyal to both systems.

This rule seems to create several problems. First, there is the problem of the person's "inner consistency". People generally feel uncomfortable in a state where they are "of two minds". Their natural tendency is to try to overcome this duality and achieve "inner consistency". All these terms, however, are purely psychological and are irrelevant to epistemology. From the epistemological viewpoint, the only relevant question is which system can help us know the world better, or at least have a greater probability of achieving this goal. Since there are an infinite number of systems on the logical level, with no way of deciding among them, and there are a very large number of such systems on the sociological level as well, the individual is left with only those systems that are available to him because he has some psychological attachment to them. However, the existence of this psychological attachment is also an epistemological consideration, as it is one of the conditions for making the system workable for the individual. In the case described here, even the psychological plane does not satisfy the individual completely, since he has two parallel systems at his disposal, but this limits his possibilities considerably. From this point on, choosing one system over the other would be totally arbitrary. If the individual feels a psychological need to make this sort of choice for the sake of "psychological consonance", he can do so, but he should know that this choice has nothing to do with his ability to discover the truth. Thus even if he does make a choice for this reason, he should continue to think in the other system in parallel, for the sake of his epistemic and intellectual consonance.

Second, there is a problem from the aspect of the systems themselves. Each system is total, due to the self-adoption principle, which means not only the system's affirmation of itself but also the negation of opposing ones. Even though the real systems are open, the ideal systems are not. The fact that the speaking self has parallel psychological attachments to two or more systems is thus a flaw from the standpoint of each of these systems.

However, this is not a real problem either. On the contrary, it is precisely the separation rule that provides an appropriate solution to the problem of totality. After all, the individual who maintains a parallel but separate psychological attachment to each of his native systems preserves the totality of each one – even if separately and in parallel. Although each system demands total control over the individual's mind, it is precisely the rival solution – merging the two systems – that threatens this totality, much more than does the solution of separation, since the merging of the systems requires a mechanism of hierarchy or compartmentalization between their sources within the combined system, whereas separation makes it possible to preserve each system in a pure state. In the case of separation, the totality of the two systems is only minimally affected.

Complete totality is impossible anyway, since the totality of one system requires the rejection of all competing systems, and the individual under consideration has no non-arbitrary justification for rejecting one system rather than the other.

Finally, there is the problem of deciding normative practical issues. While people can use both their systems in parallel when dealing with data from the descriptive sphere, they have to choose one or the other in the sphere of normative data needed for practical decisions. Since the discussion so far has not dealt systematically with normative data, the problem is quite acute and demands a solution. Indeed, this issue requires an extensive, systematic discussion, which cannot be provided here, so I will merely outline it.

From the logical standpoint, there are two major normative categories: obligations and permissions. Both are divided into two qualities: positive and negative. Thus, there are positive obligations (one must perform act A) and positive permissions (one may perform act A). The positive obligations stand in opposition to the negative obligations, or prohibitions (one must not perform act A), while the positive permissions stand in opposition to the negative permissions (it is permissible not to perform act A). There is no contradiction between the two permissive categories, because permission to perform act A includes permission not to perform it, and vice versa. There is no necessary contradiction between the two negative categories either, since the prohibition on performing act A includes the permission not to perform it. Thus the only necessary contradiction among the normative categories is that that between positive obligations and negative obligations.

In light of these observations we can say that in cases when both systems transmit data referring to the same normative question one should act in the following ways:

> When both systems transmit a positive obligation, one should act accordingly.
> When both systems transmit a negative obligation, one should act accordingly.
> When both systems transmit permissions, one may do as one wishes.
> When system A transmits a positive or negative obligation and system B transmits a permission, one should act according to system A.
> When system B transmits a positive or negative obligation and system A transmits a permission, one should act according to system B.

Thus a problems arises only in the following cases:

> System A transmits a positive obligation and system B transmits a negative obligation.
> System B transmits a positive obligation and system A transmits a negative obligation.

These are indeed hard cases, since whatever the individual does, he will necessarily be violating the rules of one of the systems to which he feels a psychological attachment. This dilemma can be solved in one of the following ways: (a) the conservative solution – "when in doubt, do nothing" (based on BT Eruvin 100b) – that is, keep the negative obligation; (b) the libertarian solution – "when in doubt, do what you want" – i.e., the decision returns to the individual's judgment, so he can decide according to his vivid beliefs or emotional tendencies, or in any other arbitrary way; (c) the subjective solution – "when in doubt, act according to the obligation to which you feel more attached", even if you cannot justify it any more than the opposite obligation.

Indeed, anyone who was raised within two cultural systems is liable to incur such problems from time to time. The psychological difficulty of thinking in two separate systems in parallel poses a challenge, which is all the greater when there is a normative dilemma in everyday life. But the person who faces this challenge does not have to feel unfortunate. On the contrary, he has the great good fortune of living in two worlds, which provide two potential parallel opportunities for achieving the truth, while people who were raised within only one system do not have such opportunities.

The exhaustiveness rule: A person should be as knowledgeable as possible about his/her adopted system, its basic sources and the division of labor between them, and should try to receive the maximum amount of data that the system can provide him/her. The same is true in the case when one has more than one adopted system.

This rule seems to be ethical rather than epistemic, akin to the ancient Greeks' "Know thyself". However, in light of what has been said above, it also has epistemic value.

On the ethical plane, people are obligated to their adopted system and its cultural community. Since it is people who operate the systems, the data that are received within them are transmitted to all the people who belong to the cultural community. Thus, every activation of the system helps use its sources to the maximum extent and constitutes a contribution to the cultural system as a whole. Every system aspires to totality, however, and consequently it can be realized fully only when external sources are not involved, i.e. on the utopian level of the ideal system. Indeed, all real systems, including personal ones, fail to meet the standards of the ideal systems to which they aspire. To make the fullest possible use of the sources in the ideal system, people need to distinguish between data that are transmitted as part of the system and data from outside sources that have become intermingled with it. A full and pure operation of the ideal system can be achieved only when all the data are drawn exclusively from its own sources, without the intervention of any external source. Unattainable as this goal may be in real life, it can still mark the end of the road.

On the epistemic plane, this rule is a condition for discovering the truth according to the requirements of the system that the individual activates. Since even a personal system considers the ideal system as the object of its aspiration, every deviation from an ideal system, even on the part of a personal system, leads to missing the opportunity to discover the truth in the given cultural system. To approach the ideal system to the maximum possible degree, however, one must make sure that the data actually fit the system.

I believe that the pragmatic principle and the rules derived from it are based on rational considerations, and so they are valid only for WRS. As hinted at above, even arguments presuming to have a "neutral" perspective on all the systems can only be made within a particular system. Still, the purpose of this argumentation is only to explicate the process of adopting sources, and once this has been done, there is no longer any need for it.

The result of the principle of making the purest use of a system and the rules derived from it is clear. People who have a psychological attachment to two or more systems are, practically speaking, in a permanent state of *non liquet* with regard to these systems. With regard to the data, such people are in a state of *non liquet* only when there is a contradiction between the systems. Only in a utopian situation in which the truth is fully known in such a way that it is agreed upon by all viable systems would people be able to know which system is better than the others.