CONCEPTUAL AND FACTUAL RELATIVITY AND REALISM:
A THEORY OF ABSOLUTISM
REGARDING MICROPHYSICAL FACTS AND CONCEPTS

NAZIM ADAKLI

BOĞAZİÇİ UNIVERSITY

2015

CONCEPTUAL AND FACTUAL RELATIVITY AND REALISM:
A THEORY OF ABSOLUTISM
REGARDING MICROPHYSICAL FACTS AND CONCEPTS

Thesis submitted to the

Institute for Graduate Studies in Social Sciences

in partial fulfillment of the requirements for the degree of

Master of Arts

in

Philosophy

by

Nazım Adaklı

Boğaziçi University

2015

DECLARATION OF ORIGINALITY

I, Nazım Adaklı, certify that

- I am the sole author of this thesis and that I have fully acknowledged and documented in my thesis all sources of ideas and words, including digital resources, which have been produced or published by another person or institution;
- this thesis contains no material that has been submitted or accepted for a degree or diploma in any other educational institution;
- this is a true copy of the thesis approved by my advisor and thesis committee at Boğaziçi University, including final revisions required by them.

Signature……..

Date ……

ABSTRACT

Conceptual and Factual Relativity and Realism:

A Theory of Absolutism Regarding Microphysical Facts and Concepts

Conceptual relativity emerges from Hilary Putnam's argument referred to as "Carnap and the Polish Logician" and Ernest Sosa's argument referred to as "the Explosion of Reality". It is a genuine phenomenon despite Donald Davidson's rejections, but it does not entail factual relativity as Michael Lynch argues. Furthermore, Lynch's position is not compatible with metaphysical and alethic realism as he claims. Previous positions defending or rejecting factual relativity claim either all of the facts are relative, or none of them are. Only Ernest Sosa argued that solely philosophically abstracted facts are absolute. I take his lead of non-maximalism regarding factual relativity and offer my own alternative as absolute facts. My theory offers that what is referred to as ideal microphysical subvenient first-order facts in David Armstrong's physicalist and naturalist metaphysics should be the only absolute part of the factual reality. But unlike Armstrong, I argued for a one-way, non-reciprocal supervenience between the first order and second order facts. Similarly exhibiting an asymmetrical structure, absolute facts do not correspond but *respond to* relative propositions while generating truth. Also, relative schemes are not commensurable with the absolute scheme, but they are *mensurable* in it. Dealing with all these issues, the thesis becomes an introduction to a brave new theory of factual reality, truthmaking and conceptual schemes, still maintaining the initial idea of compatibility between conceptual relativity and metaphysical and alethic realism.

ÖZET

Kavramsal ve Olgusal Görelilik ve Realizm:
Mikrofiziksel Kavram ve Olguların Mutlakiyetliği Hakkında Bir Teori

Literatürde Hilary Putnam'ın "Carnap ve Polonyalı Mantıkçı" ve Ernest Sosa'nın "Gerçekliğin Patlaması" adı verilen argümanlarından doğan kavramsal görelilik, Donald Davidson'un karşı çıkışlarına rağmen geçerli bir fenomen, ancak Michael Lynch'in iddia ettiği gibi olgusal göreliliği de gerektirmiyor. Ayrıca, Lynch'in pozisyonu kendi savunduğu gibi metafizik ve aletik realizmle de uyuşmuyor. Olgusal görelilik hakkındaki daha önceki pozisyonlar ya tüm olguların göreli olduğunu, ya da hiç birinin göreli olmadığını savundu. Yalnızca Ernest Sosa yalnızca felsefi olarak soyutlanmış olguların mutlak olabileceğini savundu. Ben Sosa'nın bu heptenci olmayan yaklaşımını aldım ve kendi alternatif mutlak olgu anlayışımı oluşturdum. Benim teorime göre, David Armstrong'un fizikselci ve doğalcı metafiziğinde ideal mikrofiziksel ve bağımlı-öncül olarak tanımlanmış olgular, olgusal gerçekliğin mutlak kısmını oluşturmaktadır. Ancak Armstrong'dan farklı olarak ben göreli ve mutlak olgular arasında tek yönlü, karşılıksız bir bağımlı-ardıllık ilişkisi olduğunu düşünüyorum. Aynı asimetrik yapıyı temsil edecek şekilde, mutlak olgular göreli cümlelere yalnızca tek yönlü olarak karşılık gelerek doğruluk ilişkisini oluşturuyor. Ayrıca göreli kavramsal şemalar mutlak kavramsal şema içinde tek yönlü olarak ölçülebilir durumda. Bütün bu meselelerle uğraştıktan sonra, bu tez taze bir olgusal gerçeklik, doğru-yapıcılık ve kavramsal şema anlayışı önerir hale gelmekte. Ancak bunu yaparken en baştaki kavramsal göreliliğin metafizik ve aletik realizmle uyumlu olduğu fikrini de korumakta.

ACKNOWLEDGEMENTS

I would like to express my special thanks and appreciation to a few people without whom this work would not be possible:

- to Prof. Murat Baç, for his excellent supervision during all the processes that this thesis has gone through.
- to Prof. İlhan Inan and Prof. Gürol Irzık, for their inestimable contributions and feedback.
- to Assist. Prof. Yıldız Silier, Prof. İlhan İnan, and Prof. Murat Baç, for their invaluable support during my period of Ph.D. applications, enabling my new journey to the University of Virginia.
- to Prof. Steven Voss, also for his invaluable support during my period of Ph.D. applications, proofreading my sample paper, which now consists some parts of this thesis.
- to the Scientific and Technological Research Council of Turkey (TUBITAK), for 7 years of financial support in the form of undergraduate and graduate scholarships that enabled me to continue my studies.

Dedicated to Ayla, my beloved and companion in what comes next.

TABLE OF CONTENTS

INTRODUCTION

There seems to be a complex set of relations between language and reality. While many sub-issues in philosophy are informed by the nature of these relations, this nature itself is controversial in the literature. As an example, one can say that any theory of truth commits to specific assumptions concerning these relations. Proponents of, let's say, correspondence theory of truth, must at least assume and defend that certain phenomena which belong to the domain of language can somehow correspond to certain phenomena which belong to the domain of reality. This is what I refer as an assumption regarding relations between language and reality. While providing a basis for the correspondence theory, this assumption itself is, of course, open to question. Indeed much of the effort spent to arguing for correspondence theory should be spent on defending its assumptions concerning natures of the language and the reality. It is generally the case that competing theories of truth offer a unique set of those assumptions. When we seek to offer theories of truth, we make claims on *what the nature of the language or the reality is*, to lay the ground for the specific perspective of truth which we defend. We aim for a holistic coherence between what we say about language and reality on one hand, and the truth on the other, and if our understanding of the nature of language and reality changes, it will certainly have effects on our understanding of how truth occurs. Truth is not only the notion that is informed by assumptions regarding relations between the language and reality. The related literature also dives into analyses of the notions of truthbearers and truthmakers, propositions and facts, concepts and objects, or truth value and existence. These sub-issues have their own analyses and terminology which occupy an enormous space in the literature of philosophy. My point is that, developing a refined and coherent

understanding of relations between language and reality is highly important also because it could illuminate the literature which involves each of these sub-issues. Indeed while reading this thesis, you will notice that when I am actually trying to analyze the relationship between the doctrines of conceptual relativity, metaphysical realism and alethic realism, I will occasionally delve into many sub-issues regarding facts, propositions, truthmakers, truthbearers, concepts, objects, truth value and existence. This is because all these sub-issues are bound by the meta-level assumptions we make regarding the relations between language and reality, and what I aim is to clarify these assumptions.

In this thesis I will deal with the issues around the notions of conceptual relativity (CR) and factual relativity (FR),[1] and they are essentially claims on what language and reality are like. CR is a theory which makes claims on the nature of language, whereas FR is a theory which makes claims on the nature of reality. Depending on the outcome of the discussion regarding these theories, one can argue for the plausibility or implausibility of some of the theories belonging to the sub issues of facts, propositions, truthmakers and the others I mentioned in the above paragraph. I will later refer to Putnam who argued that CR is linked to the correspondence theory in such a way that if CR is the case, then correspondence theory is not. This is due to his belief that if his claims regarding CR in the field of *the nature of language* are true, they are logically linked to some claims regarding the correspondence theory of truth in the field of *the nature of truth*, in such a way that these claims have to be false. This example illustrates the decisive importance of the discussions of CR and FR over the set of these

[1] The abbreviations I use throughout this thesis are not commonly used for these notions. I am introducing them for simplicity.

crucial sub-issues in philosophy that I mentioned. The claims about CR, FR and the sub issues are interconnected in such a way that a successful argument for CR is able to shift the opinion of a respected philosopher like Putnam on whether he should maintain the correspondence theory of truth or not. Similarly, my thesis will begin simply, with what the nature of CR is, as an analysis of language. But in the end, it will evolve into an introduction to an alternative theory of factual composition of reality and relations of truth, illustrating again the power of analyses of language over our metaphysical and alethic theories. This is the reason why I chose to deal with the task to refine our understanding of CR, FR and the sub-issues, and strive for a coherent picture between them. In my belief, despite the fair amount of effort, no philosopher has managed to paint such a picture.

Therefore, in the first chapter of this thesis, I aim to engage with the previous arguments related to CR, FR and their relationship to the sub-issues, discuss their strengths and weaknesses, and discuss where I think they failed. I will present how CR has come to become a viable theory despite Davidson's objections. Later on I will present how Lynch argued that FR is logically entailed by CR, and how others thought there are several other reasons to maintain FR. I will cast doubt on the initial entailment, but agree with some points on that FR is actually a necessary and valuable doctrine. Yet I will describe how the previous efforts have been insufficient to provide a rigorous theory where CR and FR peacefully coexist with metaphysical and alethic realism.

Later on, I will attempt to paint my own picture of a more coherent version of the relations between CR, FR and at least three doctrines, namely metaphysical realism, truth realism and correspondence theory of truth. Previous approaches were maximalist

regarding FR, in that they either maintained that either all facts are relative or none of them are, except Ernest Sosa. He argued that some facts are relative, while others are absolute. Although I disagree with his version of absolute facts, I will take his lead and offer my own alternative for an absolute fact. While doing that, I will be heavily inspired by David Armstrong's works and the understanding of metaphysics that he left as a valuable legacy for us, in that I will argue that absolute facts are those that are referred to in microphysical facts in Armstrongian terminology, which all other facts supervene upon. I will explain why I offered microphysical facts as absolute, and why I believe only the microphysical layer of the factual reality is scheme-independent. While also parting ways on numerous issues with Armstrong, the rest of the chapter will continue as I will dive into my own unique theory regarding absolute and relative facts and their natures. The major divide between me and Armstrong will be that I take supervenience as a one-way relationship and that only relative facts supervene upon absolute facts, and not vice versa.

In chapter 3, I will tell the lingual side of the metaphysical story that I have offered in chapter 2. This time there will be relative and absolute concepts, propositions, conceptual schemes and languages. As the most common form of alethic realism is the correspondence theory of truth, I will analyze four possible pairs of relative and absolute facts and propositions, generating the correspondence relationship. While there is a correspondence relationship between the relative fact and the relative proposition, I will argue that there is only a one-way *respondence* relationship from the absolute fact to the relative fact. Furthermore, I will argue that the relative schemes are not commensurable, but *mensurable* in the absolute microphysical scheme. These two claims will be the *de*

dicto counterparts of my previous *de re* claim regarding the supervenience relationship of the relative facts upon the absolute facts is a one-way, asymmetrical relationship, contrary to the reciprocal relationship in Armstrong's descriptions. Lastly, I will analyze the pair of the absolute fact and the absolute proposition correspondence, which I believe generates the kind of non-mediated truth that can only occur in language which can only be developed by the completed ideal microphysics.

CHAPTER 1

CONCEPTUAL AND FACTUAL RELATIVITY

1.1 Conceptual relativity

One can locate different usages of the notion of conceptual relativity throughout philosophical discourse. The doctrine of CR I mainly discuss, in the form most highly elaborated by Michael Lynch (1998, pp. 16-54; 2002, 57-65), dictates that every proposition is embedded within some conceptual scheme.

> According to the pluralist, my claim that *there is an x that is f* actually expresses a proposition of the form *there is an x that is F relative to C*, where C denotes my conceptual scheme. And if existential propositions are relative to a conceptual scheme, so, it seems, must every proposition. Thus a relativism of metaphysical concepts globally expands. I can express determinate propositions only relative to conceptual schemes
>
> This isn't quite as mysterious as it sounds. As Sosa notes, content relativism[2] "can be viewed as a doctrine rather like relativity involved in the evaluation of the truth of indexical sentences or thoughts". Just as the proposition that Chicago is more than one hundred miles away must be evaluated relative to my present position, so thoughts about whether something exists will be evaluated "relative to the position of the speaker or thinker in 'ontological space". In both cases, the propositional content of my thought is indeterminate unless relativized –in the one case to my position in space, in the metaphysical case to my network of robust concepts and associated standards for identity, persistence and objecthood" (Lynch 2002, 64-65).

Moreover, Lynch maintains that truth values of propositions should be evaluated with respect to these schemes which the concepts of these propositions operate in, also implying that the same proposition[3] can be true or false, relative to different conceptual

[2] Lynch seems to use notions of "content relativism" and "conceptual relativism" synonymously.
[3] For a clearer understanding, I believe one could postulate only propositions that share the same conceptual scheme can be *the same.* E.g. "x is F relative to C" should not be treated as the same proposition as "x is F relative to D". Therefore, if two people speaks the same words in the same order, it is not sufficient for saying that they have made the same proposition unless they share the conceptual scheme.

schemes (2002, 65). Therefore, because there can be equally correct conceptual schemes, there can be different but equally correct stories of the same reality (1998, pp. 16-29).

1.1.1 Justificatory arguments for conceptual relativity

The necessity to relativize concepts and propositions to conceptual schemes became eminent after the emergence of two compelling thought experiments by Hilary Putnam and Ernest Sosa, which I prefer to refer as *justificatory arguments* for CR. Putnam imagines a disagreement between Rudolf Carnap and a Polish logician (1988, pp. 112-114). Michael Lynch's refined version of Putnam's argument (2002, 61-62) is as follows: Suppose that there is a bag with marbles X, Y and Z in it. When we ask Smith and Johnson, two philosophers, how many objects there are in the bag; we get the answers "3" and "7" respectively. The disagreement is due to the fact that Smith's understanding of the concept of *object* is closer to everyday usage, while Johnson is a mereologist who believes any sum of different objects is another different object and his understanding is closer to the philosophical school that is known as the Polish Logicians. While Smith only recognizes the objects X, Y, Z in the bag, Johnson differentiates X, Y, Z, X+Y, X+Z, Y+Z, and X+Y+Z as separate objects, emerging a plurality of possible answers that can be given to the question, varying among different conceptual schemes used by different agents. Can it be argued that only one of these answers is true and the other false, when Smith's and Johnson's very conceptions of the term *object* are different? Conceptual absolutism says this must be the case, and holds that there is a single true answer which can be given to this question. Lynch argues that conceptual absolutism assumes "a Fregean understanding of concepts with precise boundaries"

(2002, 62) for concepts like ‘individual’ or ‘object’. He concludes that the absolutist approach is less useful, especially because debates around such ambiguous concepts seem unresolvable.

Ernest Sosa made a similar defense of CR (1993, 605-626; 1998, pp. 408-411) in his *explosion of reality* argument. Suppose that there is an ordinary snowball (B), constituted by some piece of snow (P). P also constitutes a snowdiscball (D), defined as an object made from any disc-shaped piece of snow which is convergent with P within the space it occupies. According to Sosa, we have to accept that P, B and D are distinct entities, since P would survive squashing but D and B would not, and D would survive partial flattening while B would not. It follows that if P constitutes D, it also must constitute a huge multitude of other D-like objects which converge within the same space with P. We are therefore left with what Sosa calls “an explosion of reality”, because any position which holds that only B is a real object but D and D-like entities can distinguish B’s objecthood only in an arbitrary manner without any objective criterion. According to Sosa if we do not want to make such an arbitrary decision, we should adopt a form of relativism that renders both propositions “P constitutes D” and “P constitutes B” true, relative to different conceptual schemes.

These two examples illustrate how the conceptual scheme within which a proposition operates gets to have a say on its truth value. I refer to these two thought experiments as *justificatory arguments* for CR, because they created a philosophical problem by introducing the phenomenon of CR. Basically, the problem posed by them is the perplexing picture of relations between concepts, reality and truth. It forces philosophers to reevaluate or shift some of their long-established realist inclinations in

metaphysics, epistemology and philosophy of language. I am not alone in thinking that CR was the impetus behind Putnam's move away from realism in his epistemic theory of truth (Horgan, Timmons, 2002, 1). These arguments are so compelling that they can potentially *justify* shifting one's philosophical perspective toward some major questions of philosophy, or giving up various realist positions regarding metaphysics or epistemology.

After the emergence of the justificatory arguments, Lynch and many others have worked on the question whether CR is a genuine phenomenon, and more importantly on whether it is compatible with metaphysical realism,[4] truth realism[5] and the correspondence theory of truth (Putnam, 1988; Sosa, 1993, 2005; Lynch, 1998; Horgan, Timmons, 2002; Baç, 2006).[6]. Each of these philosophers' stances toward the genuineness of CR carries their own epistemic/metaphysical consequences in the sub-domains related to the realisms. On the other hand, if one pursues a Davidsonian (1974, 183-198) approach to conceptual schemes, one can reject the legitimacy of justificatory arguments altogether. I believe Lynch and Sosa provide sufficient refutations of the Davidsonian approach in their works to be convinced into holding that CR in general is a genuine phenomenon, and indeed a great number of philosophers already hold CR as such. The main aim of this thesis is to discuss the terms and nature of this genuineness, not to argue for the belief itself. Yet before moving on, I would like to make one more

[4] Basic metaphysical realism: "There is a world that exists independently of the mental" (Lynch, 2002, 71)
[5] Minimal truth realism: "A proposition is true when the world is as that proposition says it is" (Lynch, 1998, ch. 5)
[6] I will refer to the combination of metaphysical realism, truth realism and the correspondence theory of truth as "realisms" from now on.

case against Davidson, especially with the intention of coming back to it many times in later parts of this thesis.

1.1.2 On Davidson's rejection of conceptual schemes

According to Davidson, the very idea of a conceptual scheme itself is objectionable. People may speak different languages and conceptualize the world differently; but the fact that these languages are translatable into one another allows one to elude the idea of conceptual schemes altogether. No language is untranslatable to another (as an extension, no two belief systems are incommensurable) (1974). I believe Davidson's rejection would be plausible if differences between conceptual schemes were limited to assigning different names to different objects, properties and relations and the problem was as simple as translating different names one another. But I believe (like most others who believe in CR) that there is a further complication since in different conceptual schemes, we also tend to merge otherwise differentiated objects into the same concept, or do the reverse, and thus 'frame' or 'carve' the world differently. The same concept can have different borders under different names or in different languages, as well as inside the same language. A commonly used example in structural linguistics helps to illustrate this.

Table 1. Names of colors in three languages and the color spectrum

<table>
<tr><td></td><td colspan="6">-400 nm ----------Visible Light Wavelength----------700 nm-</td></tr>
<tr><td>English</td><td>Purple</td><td>Blue</td><td>Green</td><td>Yellow</td><td>Orange</td><td>Red</td></tr>
<tr><td>Shona</td><td colspan="2">Cipsuka</td><td colspan="2">Citerna</td><td>Cipsuka</td></tr>
<tr><td>Bassa</td><td colspan="3">Ziza</td><td colspan="3">Hui</td></tr>
</table>

Structural linguists take language as a system of interconnected units (Saussure, 1983). A concept in such a system gains its meaning with respect to other concepts which it is in relation with. As can be seen in Figure 1, the color blue does not exist in Shona or Bassa languages. Instead *cipsuka* and *cicena* colors in Shona, and *ziza* color in Bassa, encompass the shades color we call blue in English. What this tells us is that different languages carve and frame the color spectrum differently and distinguish colors in different manners. Thus the concepts of color in those languages exist in relation to other concepts of color, as the structural linguist would claim. The claim is indeed parallel to conceptual relativism, in that we can simply interpret it to say that these languages exhibit different conceptual schemes on how to frame the color spectrum.

Now, imagine I am writing a letter to a Shona person in Zimbabwe. How can we translate the proposition "the sky is blue today in İstanbul"? The color *cicena* encompasses the shade of blue that I see in the sky today in the Shona language, but Shonas do not differentiate between that color and green. On the other hand, I do not want to come off as suggesting the sky could be blue or green. I want her to understand that sky is blue and not green. If Davidson was right, I could have done that by translation alone, but there seems to be no way to translate my English into her Shona and transmit what I want to say, except teaching her the conceptual scheme of English and how English distinguishes some shades of *cipsuka* and *cicena* as blue. Therefore, translation is generally not as easy, since one cannot always find the equivalent concepts among different languages; most of the time it involves introducing different ways to carve out and frame reality so that relevant differentiations are made.

Davidson would say that since I can do all this work in English, the schemes are still translatable. In this thesis I am able to make the reader grasp the meaning of the color "*cipsuka"* without any need to speak Shona, and similarly I could make the Shona person grasp the meaning of the English concept "blue" solely using the English language. According to Davidson, this is still translatability. But what if it is the very way of reality-carving the Shona person and I disagree upon? What if the Shona person rejects to carve and frame that specific color spectrum as blue and differentiate colors that way? What if the Shona person, being able to grasp our way of carving the color spectrum, still wishes to insist that sky is *cipsuka* and not blue? Can we really say one of these ways to carve the light spectrum is the right way and ground this on some objective criteria? I believe not, since choosing between this or that way of color spectrum carving seems arbitrary[7] No one can claim that the Englishmen or Shona people carve the light spectrum in an ultimate manner, because if one wishes, she can carve the color spectrum into an immensely large number of colors or just divide it into two, black and white. An imaginable person (e.g. someone with an eye disease) who is only able to perceive in the colors black/white might even prefer to use the binary color spectrum carving. Two such people sharing that scheme can communicate with each other, saying "the sky is black". With respect to their scheme, I do not believe that such a proposition would be false. If we claim these people to be wrong, then we could be

[7] By arbitrary, I mean it is a matter of personal or communal choice. I don't mean that this choice is unable to be made without any kind of objective criteria. In fact, I find that the more a language divides the color spectrum, the more it obtains precise concepts, enabling its users to speak more clearly. On the other hand, having five hundred colors in one's scheme would not be practical for everyday use of language. If we generalize this phenomenon to schemes and language, I believe it is arguable that there is a matter of balance between precision and practicality in the making of conceptual schemes. Some contexts would reward the former, while some others would reward the latter. This would also explain why we prefer to shift between schemes inside our language too. Though, which scheme to prefer still remains as a matter of choice and not a matter of conforming to the ultimate reality.

wrong too in claiming the sky is blue, since some other person using some other language which carves the shades of color that we call blue into twenty distinguished colors can say we are wrong when we say the sky is blue, much like we can claim it for the people who say the sky is black.

Thus, when conceptual relativists argue two schemes as non-translatable or two belief systems as incommensurable, they by no means say that schemes or belief systems are impossible to transmit even in terms of the host scheme or belief system. We can use English to grasp the color *cipsuka*. On the contrary, it is this nature of schemes that enables us to use different schemes when different contexts force us, even inside the same language. Furthermore, languages can transfer schemes regarding certain issues from each other. In my view, a conceptual relativist (even though she might choose otherwise) is even able to admit that different schemes can be translatable to each other. The problem still remains that the choice of which scheme to maintain is arbitrary. I can make you grasp and understand the color schemes in three languages under one host language (English), and in that manner these schemes can even be translatable. But if you disagree with me on which one of these schemes to maintain, I have no further say, because there is no objective criteria. And with respect to these schemes, the propositions "the sky is blue" or "the sky is black" can both be true. The same arbitrariness in reality-carving is also illustrated in Putnam's and Sosa's examples, and they also argued that there is no objective criteria to decide which way of reality-carving is the best. The Davidsonian approach does not have any possible solution for problems illustrated in Putnam's, Sosa's or my cases.

1.1.3 Consequences of conceptual relativity

Of those that maintain CR as a genuine phenomenon, there are four main positions:

1. Putnam argues that not only is CR a genuine phenomenon, it also entails Factual Relativity (FR)[8] Basically, Putnam argued that if concepts that constitute propositions are relative, facts that correspond to these propositions should also be relative. On the other hand, according to him it is absurd to believe that facts in a realist sense can be relative, since they should be mind-independent and relativity is an indication of mind-dependence. Therefore, CR and its implication of FR are incompatible with the realisms. But because the justificatory arguments are really strong, we should accept CR. Therefore, we should dismiss the realisms (Putnam 1987, p. 19; 1988, pp. 110-114). At this point, Putnam moves on constructing his own epistemic theory of truth.
2. Lynch's position, which he calls metaphysical pluralism in general, affirms CR's entailment of FR and adds new arguments for such an entailment over Putnam's. But unlike Putnam, he argues that the combination of CR and FR is compatible with at least several forms of the realisms (Lynch, 1998; 2002). His project is to provide a theory of compatibility between CR, FR and realisms.
3. The third position affirms conceptual relativity but rejects CR's entailment of FR, rejecting arguments given by Putnam or Lynch. This way they are able to deflate most of the obstacles against compatibility between CR and realisms.

[8] Factual relativity: The doctrine that dictates every ontological fact is relative to a conceptual scheme (much like every proposition being relative in the case of CR).

Many philosophers including Paul Moser (1999, p. 37) and Mark Heller (1988, p. 118) seem to be taking this direction.

4. The fourth position denies CR's logical entailment of FR, but still maintains a non-maximalist FR (where some but not all facts are relative). Ernest Sosa (2003) and I defend that position. On the other hand, Sosa and I differ greatly on the nature of absolute facts.

Each of the positions — 2, 3 and 4 — are realist positions in that they reject the necessity of the Putnamian move away from realisms. The major breaking point between my position and positions 2 and 3, on the other hand, is that they are maximalist over the issue whether FR is a genuine phenomenon or not. Position 2 defends that if CR is the case then *all* facts are relative, whereas position 3 defends that CR is the case but still *no* facts are relative. I argue that CR does not necessitate any kind of FR, but maintaining *some* facts (an overwhelming majority of them) to be relative, and others to be absolute, is the right position, as Sosa does. On the other hand, I will offer a unique theory, primarily informed by the Armstrongian metaphysics, to explain the nature of these absolute facts. Table 2 shows the response of all the positions toward the major questions of the issue.

Table 2. A Summary of Philosophical Positions Regarding Conceptual Relativity

	Davidson	*Lynch, Baç*	Putnam	*Heller, Moser*	*Sosa*	*Adaklı*
Is CR genuine?	No	Yes	Yes	Yes	Yes	Yes
Does CR entail FR?	-	Yes	Yes	No	No	No
Is CR compatible with realisms?	-	Yes	No	Yes	Yes	Yes
Should FR still be maintained?	-	-	-	No	Yes, partially.	Yes, partially.
Which facts are absolute?	-	-	-	-	Philosophically abstracted facts.	Microphysical facts.

The rest of the Chapter 1 is dedicated to explaining the shortcomings of the previous positions that would justify the need of an alternative new position. I should first note that, although I will not engage with it directly, Putnam's position is refuted by the perspective I develop. Putnam's arguments on the issue of CR were *negative* in that he argued that because there is no way to maintain the realisms together with CR, we

should not maintain them. My view offers a way to maintain the realisms with CR, so I do not need to argue *negatively* on why Putnam's arguments were invalid, so long as I can establish *positively* that my theories are reasonable. However, I will not defend the realisms against the Putnamian, non-realist perspective of truth. My only claim against Putnam is that if CR is the sole reason to hold non-realism, instead of realism, then it is not a sufficient reason. The attempt to convince philosophers that maintain non-realism against the realisms is beyond the scope of this thesis.

Therefore, the positions I should actively refute are positions 2 and 3, and that is what I intend to do it for the rest of this chapter. I agree with position 3 that if FR is presumed not to be a genuine phenomenon, it becomes non-problematic to maintain realism about truth and metaphysics. If concepts are relative but facts are not, one can maintain that an objective and absolute story of reality exists, even though our concepts and propositions that (respectively) refer and correspond to this reality are relative. The problem position 3 faces is that Putnam's efforts necessitated an exhaustive theory to be *positively* established to overcome the doubts he raised for the picture in which propositions made of relative concepts correspond their absolute factual counterparts in reality. If we accept that the criteria which determines *what makes an object* is relative to a conceptual scheme, then how can the fact of the matter which makes the proposition "there are three objects in this bag" true be scheme-independent? On the other hand, if FR is presumed to be a genuine logical entailment of CR (positions 1 and 2), then we either drop the realisms (Putnam's position 1), or maintain that FR can be compatible with them (Lynch's and Baç's position 2). If the realisms are too precious to give up, then one needs to introduce a theory of compatibility like Lynch. If there is a mind-independent realm of existence, but the facts about this mind-independent world are

relative and mind-dependent, then a theory is needed to explain how. Lynch's and Baç's projects are aimed to develop exactly such a theory (Lynch, 1998, 2002; Baç, 2006).

I will now present and analyze Lynch's and Baç's defenses of FR. I will cast my doubts on Lynch's arguments on why FR should be a logical entailment of CR, but I will agree with Baç's arguments on how FR is potent to solve certain problems that the traditional factualism faces. Later, I will argue that Lynch and Baç are presenting some very good reasons to hold onto *at least one version of* FR. In the beginning of chapter 2, I will analyze Sosa's progress in his efforts establishing adequate theories about where and how absolute facts can exist despite concepts' being relative. In the rest of the thesis I will offer my alternative theory on the matter. The rest of chapter 2 is dedicated to the metaphysical side of the issue and the compatibility between CR and metaphysical realism. And the hapter 3 is dedicated to the epistemological side and the compatibility between CR and realism concerning truth and the correspondence theory of truth.

1.2 Factual relativity

Michael Lynch and Murat Baç, being the prime proponents of position 2, have provided several challenging arguments for the genuineness of FR. I divide these arguments for FR into three lines. I will refer to the first line of argument as the *entailment argument* for FR, in which Lynch argues that CR logically entails FR (2002, 65-67). Secondly, they also develop an argument which advocate for metaphilosophical advantages of maintaining FR which are grounded in the harmony between FR and certain preferable stances which involve pluralist approaches in metaphysics, epistemology and philosophy of language (Lynch 1998, pp. 1-16). Thirdly, they have arguments which assert that FR

is a better philosophical position than Factual Absolutism (Lynch 1998, 1-9; Baç 2006, pp. 189-201) when it comes to philosophical quality and coherence. Let me begin by tackling the former first.

1.2.1 Entailment argument for factual relativity

What I call the *entailment* argument for FR is referred to by Lynch as the T-Argument (1998, p. 25; 2002, 66-67). I call it the *entailment* argument in my thesis because giving it this name helps to categorize and distinguish it from other arguments for FR. It is a simple logical derivation that aims to show that FR is logically entailed by CR. According to Lynch, maintaining CR without holding FR is a sort of "having one's cake and eating it too" attitude. Here is his argument:

> If one wishes to admit that propositional content is relative or contextual, then facts must be relative as well. The core of the argument can be summarized as follows. Assume, for the sake of argument, that some claim of the form x is F true. According to the content relativist, the proposition expressed by that claim is x is F *relative* to C. It is an a priori platitude that the content of a statement determines the necessary and sufficient conditions for that statement's truth. This is the lesson of the T-schema, or the principle:
>
> TS: It is true that p IFF p.
>
> Now if the content of a statement (the proposition it expresses) is relative, it follows that from our platitude that the conditions under which that content is true must also be relative. That is, substituting for "p" gets us (together with our assumption)
>
> (1) it is true that x is F relative to C IFF x is F relative to C
>
> Yet it is also clearly a priori that:
>
> (2) x is F relative to C IFF it is a fact that x is F relative to C
>
> By applying the logical rule transitivity of biconditionals, we should get;
>
> (3) it is true that x is F relative to C IFF it is a fact that x is F relative to C.
>
> From which it follows, together with our assumption that our proposition is true, that there is a relative fact. Content relativism entails fact relativism. (Lynch, 2002, 66-67)

For Lynch, the combination of CR and FR is compatible with multiple forms of truth realism and the correspondence theory, including truthmaker theories, states of affairs theories, and different theories of correspondence like isomorphism or causality (1999, sec. 5.4). By introducing the minimal realism about truth (see footnote 2), which is a shared assumption within most of the realist theories of truth, he tries to keep his account as neutral as possible between different interpretations of realism so that his position can appeal to a larger number of truth realists (1998, sec. 5.5). Baç also refers to relative truthmakers and not only relative facts (2006, 187).

I have my doubts on the legitimacy of this argument, because for me it is unclear that whether Lynch's premise 2 is a-priori as he claims or not, or whether it really leads to relativity of facts. Below is the premise 2:

(2) x is F relative to C IFF *it is a fact that x is F relative to C*

For Lynch's argument, the italic part of this premise is the important part which leads to the idea of FR when it reappears at the ending of the conclusion. Lynch presents the "*x is F relative to C"* part of this premise as a fact, and he defends that since this fact is relative, we should maintain FR. I agree that this premise may have a certain appeal to those who hold the identity theory of facts. In that theory, the proposition and the fact is identical, thus "*x is F relative to C"* should indeed be a fact. However, Lynch explicitly aims to establish compatibility of his ideas with more sophisticated theories of truth like correspondence theory (1998, sec. 5.4). A proponent of that theory might take the "*x is F relative to C"* part of Lynch's premise 2 as a proposition, not a fact. Since we can only refer to specific facts through propositions which encapsulate them, the T-schema might

have no way else than offering a relative proposition to refer to the truth condition. However, for the proponent of correspondence theory, saying that "*it is a fact that x is F relative to C"* may amount to saying that *"x is F relative to C corresponds to a fact".* Actually, she might object to the a-prioriness of the premise 2, claim that it is ambiguous in language, and demand from Lynch that he reformulates the premise 2 in such way:

(2) x is F relative to C IFF *"x is F relative to C" corresponds to a fact.*

In the above version, *"x is F relative to C"* is a relative proposition which corresponds to *a* fact. However, it seems unclear whether this fact itself is a relative fact. If premise 2 is formulated in such way, the logical derivation cannot conclude that there are relative facts.

Overall, Lynch's entailment argument is dependent on whether one maintains his understanding of the premise 2 or not. My opinion is that there is something wrong in interpreting the phrase *"it is a fact that x is F relative to C"* as an indicator of relative facts. On the other hand, since I will later argue for my own version of FR, and I have no problem with the principle, I do not need to specifically argue against the entailment argument in this thesis.

1.2.2 Compatibility between Lynch's FR and the realisms

Establishing the entailment of FR by CR is only the first leg of Lynch's work. Even if FR is the case, for his purposes he needs to argue that his picture is not in conflict with realisms. He does so by tackling a few problems regarding his theories that he knows the realists will bring up. I want to discuss two of these problems and refute Lynch's responses to them, because if Lynch's FR was really as compatible with realisms as he

claims, then this would be a reason to maintain FR even if it is not entailed by CR. The first problem Lynch tackles is this question; if all facts about the world are scheme-relative, then how are we able share the same world? Secondly, if all those facts are mind-dependent, then how can a realist factualist claim that, if there were no schemes, there would still be a world? Lynch's answer to those problems is the notion which he calls virtually absolutes:

> It is frequent overlooked that nothing about content relativity rules out shared concepts and therefore shared truths. There may well be certain forms of thought and experience that are so basic to human thought in general that they are universally enjoyed in human thought at a particular time. Because we are the creatures we are, certain forms of experience and concepts will be available in every conceptual scheme. Empirical concepts stemming from perception are likely to fall to this category. And there may even be some concepts that are shared by every *conceivable conceptual scheme,* since there are some concepts that we cannot conceive of doing without. Many simple logical concepts might fall into this category. In either case, the structural relationships that would exist between these universally shared concepts would entail that certain propositions would in principle be thinkable in all schemes. We could call these universally thinkable propositions *virtually absolute propositions.* And if there are virtually absolute propositions, thinkable in every conceptual scheme, there may well be propositions that are true in every scheme. If so, then by the T-argument, there will also be *virtually absolute facts,* or states of affairs that obtain in every conceptual scheme. (Lynch, 2002, p. 69)

Lynch admits that the realists would be inclined to name his virtual absolutes as real absolutes, since if a proposition is true relative to all schemes it can be true relative to none. On the other hand, he distinguishes virtual absolutes from real absolutes by saying that virtually absolute schemes may lose their status since they are subject to change over time. Therefore, virtual absolutes are not real absolutes, but they are enough to provide us with a mind-independent portion of reality, and explain how we are able to share that reality.

This last maneuver is solid in that it distinguishes virtual absolutes to preserve non-absolutism. But what do we give up in exchange for being able to ground FR through virtual absolutes? I believe a realist would be more content if at least some propositions were absolutely true all the time, or some facts to persist permanently regardless of time. Since Lynch spoke of simple logical concepts, one quick example could be logical tautologies. The proposition "snow is either white or not white" should be true under all possible interpretations, and throughout time too. If even the most intuitive true propositions are subject to change in time, then it could still violate foundations of the realist truth theories. In this manner, Lynch's theory is exposed to heavy realist criticism. Realists could say that the change in truth value of any truth proposition in time is too much a price to pay for Lynch's FR.

But even when we grant Lynch the virtually absolute for the sake of argument and assume that we all share some basic level concepts and schemes, does it solve the shared reality problem? For a moment let's go back the color spectrum example I have first given in section 1.1.2. We look at the sky with a Shona person, I claim the sky to be blue and she claims it to be *cicena* (the Shona name for the color encompassing the portion of the color spectrum from green to blue). According to CR, the Shona person and I should be right, relative to our respective schemes C and D. Lynch's FR dictates there should be two different facts about the sky relative to C and D. If facts exist relative to schemes, and both these schemes are plausible, then in its very existence, the sky should be in two different colors for two different people. On the other hand, we want to say these two people conceptually interpret the same reality and do not experience two different realities. Neither the wavelength of the light rays (color) that

comes from the sky, nor how we perceive that light, plays a role in our disagreement regarding the color of the sky. But I cannot simply find a way where Lynch's theories can enable one to say that. Since the color of the sky is not a virtually absolute fact, Lynch's theory cannot answer how the color of the sky can be mind-independent, yet ontologically different for two people, at the same time. If we believe in Lynch, even when we can share the basic virtually absolute facts like logical tautologies, we still cannot even share the same reality regarding the color of the sky. Since most the common, daily facts we share every day do not fall under the virtually absolute category, Lynch cannot still explain how we are able to share that reality.

1.2.3 The pluralistic value and philosophical coherence of FR

While I established that there exists neither a logical entailment between CR and FR in the form that Lynch describes, nor a compatibility between the realisms and Lynch's FR, there are still other reasons which pluralists point at in order to maintain FR. One line of argument for FR is grounded on the intuition that there are radically different answers to questions about human life or the world which seem to be equally correct. Especially throughout the discourse of the humanities and social sciences, we seem to be coming across many questions which seem to possess multiple alternative answers. We may know some of these answers are definitely false, but still more than one of them seem to be true. These questions look unanswerable in an ultimate and decisive manner. Facts concerning normativity, especially involving concepts like beauty, justice or the good are fine examples of such non-ultimate answers. Disagreements between philosophical schools (e.g. Kantian ethics vs utilitarianism) on ethical assessments of certain actions constitute another type of example. According to Lynch, "different views about what is

good, beautiful, or sacred can be radically divergent, even logically inconsistent and yet at the same time seem to fit the agreed-upon facts equally well" (1998, pp. 11-12). He argues that this is a reason for taking metaphysical pluralism seriously. The value of FR is found when we face unsolvable disputes or equally good rival accounts the same reality. This understanding is also parallel with both Putnam's position that Carnap and Polish Logicians may be right and Sosa's position that there is no objective criterion on which one can decide whether B, or D is genuinely *real*, in their justificatory arguments.

A second line of argument for FR promotes it as a better theory of philosophy. Baç argues that FR provides better insights to solve some of the problems which traditional factualism faces. First of all, there is the problem of global facts.

> The ontological basis of a global fact like "Snow is white" is presumably very different from that of "The rooftop of Smith's house is fully covered with snow at time t." While the ontological basis or ground of the local fact is determinable spatio-temporally, that of the global fact seems to present a considerable complication for factualism. (Baç, 2006, 190)

Furthermore, there is the problem of negative facts.

> Notice also that both local and global facts can be negative—a further complication for the traditional factualist's onto-alethic picture. The truthmaker of a sentence like "There is no snow on the rooftop of Smith's house at time t" supposedly resides in the same vicinity as the positive local one indicated above. But we do not seem to have an unambiguous idea of how the absence of something resides in a sufficiently well-circumscribed environment. The problem is further aggravated for negative global sentences such as "Snow is not green." If this sentence is true, it must be, the realist would argue, because of the existence of a truthmaker to be found in reality. Yet the paradigmatic notion of a fact is impotent to illuminate that sort of truthmaker and truthmaking relation. (Baç, 2006, 191)

Lastly, there is the problem of facts that are corresponding to vague or indeterminate concepts:

> Another source of difficulty is extensional vagueness or indeterminacy, as displayed by the sorites paradox. The idea is basically that the truth conditions of a fact like "C is a crowded city" have fuzzy boundaries, making it hard to point out exactly when, for instance, a proposition about crowdedness changes its alethic status. While it is an undisputed fact that New York is a crowded city, our confidence in making similar claims would diminish as we go on to consider less populated places. Similarly, there would be a difficulty concerning the "fact" about the number of hills in a certain region, given the qualitative and imprecise definitions we have for such terrain features as mountains, hills, and heights. So the truth conditions of our empirical statements can in certain circumstances be indeterminate or fuzzy for mostly extensional reasons. (Baç, 2006, 191)

These defects in the traditional factualism that Baç points out are individually important and distant from each other, but in the context of his paper they have one uniting property. All cases which Baç raises against traditional factualism are such that it is hard to *locate* factual counterparts of certain propositions, because these propositions are made of concepts which are subject to solid scheme-relativity.

I see Lynch's argument as an extension of Baç's argument in macro scale. Notice that if there was one and only concept of "edible", then we would have to choose between the Hindu and non-Hindu understandings of it in an ultimate manner. Depending on that, P would be absolutely right or absolutely wrong, no matter who uses the sentence. If we maintained the non-Hindu understanding of the concept, then we would have to say the Hindu person is absolutely wrong in proposing P. We would make the decision for the Hindu person on what she should consider as edible. If the same logic is applied on other normative issues, this would lead to a highly repulsive kind of absolutism where we would have to claim only one understanding in each ethical, aesthetical or political issue is true and right.

I agree that the points Baç raises are valid concerns for traditional factualism, and I understand how FR helps to improve the picture, especially for global and negative facts. Assume that there exists a fact F which is *there being no edible animal in front of me relative to C*. The scheme C here solves our problem of conceptual indeterminacy and vagueness, distinguishing which animals are actually edible for whom, or individuate who uses the proposition P that corresponds to F. To be able to locate the truthmaker, now we know what exactly we are looking for when looking for an edible animal in front of the specific Hindu person who used the proposition. On the other hand, nonexistence of this well-defined object (edible animal relative to C) is still a global fact and for a traditional factualist it is still as hard-to-locate as in the situation where the fact was assumed to be non-relative. For the traditional factualist, problems apply to non-relative global facts still seem to apply to relative global facts. Similarly, non-being of a relative entity is still as hard-to-locate in the universe as non-being of a non-relative entity. Problems that apply to negative facts also apply to here. Anybody who commits to a traditional fact ontology is still subject to those problems. But the situation is different for Baç and Lynch, who offer an alternative fact ontology.

Baç responds to this point that, in his understanding of facts, they do not have to be *located* solely in space/time. According to Baç, a fact can only exist through a triangulation process between a stable cognitive system common to the members of a particular species; a conceptual background shared by the members of a particular linguistic community; and a mind-independent reality (2006, 192). He takes the reality as the answerer part of the fact where the first two elements narrow the fact down (similar to indexicals in propositions), enabling the fact to ask the question. I accept that

such an understanding of facts can offer insight to solve the problems of negative or global facts. If the location of facts encompasses each of an agent's cognitive system, a communally achieved conceptual scheme, and the reality, then the fact the matter representing the part of reality of the absence of an inedible animal can be located in the agent's mind which defined such an animal, communally-constructed conceptual scheme that is used to define it, and confirmation of the outside reality on the non-existence of this animal. In this case such a non-existence does not have to correspond an entity in the material reality. However, I believe this creates a slight theoretical difference between Lynch and Baç. In *Truth in Context*, Lynch tries to take a position as neutral as he can be toward different understandings of metaphysical realism. Facts exists relative to schemes, but not *in virtue* of them. FR does not violate basic metaphysical realism; the doctrine there would still be a world if all minds disappear. Still, I am unclear regarding where exactly Lynch offers as the location of these facts. I read Lynch as he would not oppose if a traditional factualist (who thinks facts exist *in virtue of* the mind-independent reality, and they are located in it) maintains his pluralism. Baç's triangulation theory makes it explicit that facts are not located solely in the outside reality and as seen above, they can still exist if there are no states of affairs (objects, properties, relations etc.) that describe them are located in the mind independent reality. Thus, Baç is explicit in that his pluralism necessitates one to change his view regarding facts if this view is traditional factualism, while Lynch is unclear about that.

Despite this nuance difference, I am sympathetic to Lynch's and Baç's approaches to factualism I described in this section. Especially the second and third

chapters of this thesis will reveal that I offer a similar fact ontology on that relative facts actually located solely in our minds rather than in the outside reality, that they are mental in that they are located in minds. The difference between us, however, is that while they refuse there are also absolute facts, I propose that there are such facts. Secondly, I believe my theory will offer a better explanation on the phenomenon that, although there are relative facts, we seem to be sharing the same reality; compared to Lynch's alternative, the virtually absolute facts. Furthermore, I agree with Lynch and Baç's pluralistic inclinations that any contemporary understanding of truth and metaphysics should make sense of the issues that there seem to be unresolvable disputes between different philosophical accounts, or equally valid explanations of the same reality, or equally correct answers to certain questions. FR definitely overcomes the problem which Baç refers to as indeterminate and vague facts, and Lynch's extension of it in the macro scales of normativity. We are on the same page in thinking that we should adapt to pluralism where we can, but without giving up our realist inclinations. This is why I see my project as a further improvement of their theory, instead of being a rival account. As I illustrated in Table 1, we try to reach to the same conclusion despite the fact that we use different paths to do it. This is also why I believe we should hold on to the idea that *the overwhelming majority* of the facts in the universe are relative. We should believe in *a version of* FR not because CR entails FR as Lynch defends, but because FR explains how the relativity of facts overcomes the indeterminacy/global facts/negative facts problems as Baç defends, and because such a picture lays the ground for the pluralistic accounts for normative issues as Lynch defends.

The question remains. Which version of FR is acceptable? As I pointed out in previous sections, we need to paint a picture where facts are relative to mind-dependent schemes, but there is still a part of the world which is mind-independent. If the world is made of facts as a traditional factualist believes, then how can these facts be mind-dependent without making the world mind-dependent too?

CHAPTER 2

MICROPHYSICAL FACT ABSOLUTISM, REALITY AND TRUTHMAKERS

2.1 In search for the absolute fact

The debate over whether CR entails FR goes back to when Putnam published *Representation and Reality* in 1988 and introduced his Carnap and the Polish Logician argument for the first time. Since then a multitude of philosophers have engaged in the discussion over the issue. In my thesis, CR and FR are presented as distinct theories. CR is a theory mainly about language and the truth value of propositions, whereas FR is a theory of metaphysics and how the world is. In the beginning, philosophers did not refer to any kind of FR. There was no distinction between CR and FR, and FR was simply a presumed doctrine by defenders of theories of CR. When Putnam and others referred to CR, what they meant was the totality of CR and FR. In one of his works, Sosa refers to CR as "a thesis about ontological constitution" (1998, p. 566). It was Lynch distinguished between CR and FR. Before Lynch, the initial respondents of Putnam mainly shared a simple position defending CR but rejecting FR. At that time, since CR was presumed to be encompassing FR, their works look as if they reject CR outright. It seems to me that what they reject is actually the relativity of metaphysical facts, and that they did not have a major problem with the notion that the propositions are relative to conceptual schemes:

> Even if we have no nonrelative way to refer to the world, there is still a non-relative fact about what the world is like. It is our descriptions of the world that are relative to our conceptual schemes, not the world itself. (Heller, 1988, p. 118)
>
> From the fundamentally and ineliminably perspectival character of our thought it does not follow that reality itself is fundamentally perspectival. (Sosa, 1993, 608)

> Saying and asking are, naturally enough, "relative to some background language" but it does not follow that the objects about which one says or asks something are similarly relative. (Moser, 1997, p. 37)

As can be seen above, until Lynch, the debate was focused on whether FR is genuine or not. Putnam proposed that it was genuine (and this genuineness necessitated trashing correspondence theory), and his critiques replied mainly alongside the pattern of accepting CR and rejecting FR. Before Lynch, no philosopher attempted to argue for a theory of compatibility between FR and the realisms. Therefore, no major effort has been made to argue for incompatibility between FR and the realisms. This incompatibility was simply presumed, until Lynch attempted to refute this presumption.

After Lynch presented his ideas in *Truth in Context*, he and Sosa engaged in a debate over the nature of FR. Sosa criticized Lynch's entailment argument on the grounds that, although we have no way to state a fact in a non-relative manner, it is just the statement but not the fact that should be regarded as relative (2003, pp. 10-11). But Lynch's arguments for FR was sound in that he managed to convert Sosa into maintaining that at least some facts should be relative. The debate shifted over whether all or some facts should be relative. While Lynch defended a maximalist theory of FR where all facts are regarded as relative, Sosa tried to offer a non-maximalist version of FR where, although most facts are regarded as relative, some of them are still absolute. Sosa realized that being a non-maximalist factual relativist is still a stance sufficient for maintaining realisms, and argued that relative facts and states of affairs should be dependent on the existence of non-relative facts and states of affairs. He argued that even if it is a fact relative to a conceptual scheme that a snowball (A) is white, it is also possible that:

> (P) Relative to our conceptual scheme, A is white IFF there is an existing entity consisting of that snowball A and the property whiteness, where A exemplifies whiteness independently of anyone's thought or speech or conceptual scheme (Sosa, 2003, p. 15).

Lynch responded to the above argument by arguing that the fact of the matter such a proposition (P) corresponds to still does not hint at the existence absolute facts, especially when we cannot express this fact without a relative proposition. Lynch says Sosa is well aware of this problem and this is the reason why he makes a maneuver to distinguish philosophical contexts from everyday contexts:

> In Sosa's view our everyday thought about what exits is indexed to a conceptual scheme, with certain implicit persistence and identity conditions for objects. But in philosophical context "we can abstract away from the object-delimitations normally presupposed in our ordinary speech and thought. Within this special philosophical context we hold a "latitudinarian", absolutist metaphysics according to which "ontologically anything goes". On this view the absolute truth about the world is that there are plenty of things beyond the delimitations presupposed in the ordinary contexts. What's more, we can say, relative to this philosophical context, that great many things that may exist do not do so relative to any human conceptual scheme (Lynch, 2002, 66).

Lynch counters Sosa's move, arguing that even philosophical contexts exhibit scheme-relativity:

> I agree that philosophy often starts with minimal, ontologically neutral truths. Yet there is quite a substantial ontological view being expressed when we say that "ontologically anything goes". That view is that the particulars of the world are objectively related and propertied in an infinite amount of ways, and in ordinary contexts humans pick some of these relations and properties while ignoring others. The resulting picture is one in which the world contains more kinds of things than ordinarily thought, not less. I submit that far from being ontologically neutral, the ontologically liberal context Sosa has in mind is itself a player, not a referee. It seems to be a conceptual scheme like any other.
>
> Furthermore, some ontological conflicts are not about the number of objects but over how to understand the nature of one object. Consider a debate between an Aristotelian and a Spinozist. The Aristotelian will insist that a particular person is an enduring substance with certain properties. But a disciple of Spinoza will claim that a person is a mode of one substance, Nature; as it were, is "personish here-about". The conflict between these two theories isn't additive in the manner

> of Putnam's mereological, or Sosa's snowball and snowdiscball example. Persons are enduring, discrete particulars, or modes of the one substance. According to the advocates of these views, they cannot be both. (2002, 69)

Thus Lynch argues that the only viable solution for Sosa is to retreat to the position that even though we cannot refer to absolute facts without relativity, there might still be a mind-independent world with absolute facts about it. Because of its unknowability, this world is equivalent to what we refer as the noumenal reality in the Kantian lore. The problem is that we cannot even state there is such a world without employing relativity. Lynch believes that if it is a fact that there are some scheme-independent facts, this fact should still be relative to a scheme. Finally, he admits that there might be non-relative facts, but the price of retaining them is admitting that they are a mystery (2002, 69). Instead of committing to such a mystery, he defends that we should simply accept there are no absolute facts whatsoever.

Of all the philosophical positions regarding CR and the surrounding issues, I must say that the one I sympathize with most is Sosa's. His position provided the initial impetus for me to develop my own theory. Sosa's position is a non-maximalist approach to FR, in that it argues that most facts are scheme-relative but some are still absolute. Non-maximalism regarding FR is advantageous if one can maintain it, because it allows one to dissolve the problem posed by CR on why we seem to be unable to refer to most facts without relativity on one hand, and it provides the mind-independent portion of factual reality to satisfy the realist inclinations on the other. The downside of Sosa's position is that I believe Lynch has successfully refuted it. He is right in arguing that philosophical contexts are themselves players and not referees. Furthermore, philosophical facts with highly abstracted concepts seem to be encompassed with

relativity at a greater degree compared to everyday facts like snow being white. Debates on these facts are more controversial, and they mainly consist of the cases where we have equally true alternative answers to the same questions. The very disagreement between Carnap and the Polish Logician emerges not from a debate over everyday facts, but a philosophical split over the nature of the abstracted concept of the "object". Philosophical contexts are not only subjects to relativity on a par with any other context as Lynch defends, but they even exhibit a greater degree of relativity.

2.2 The argument for microphysical fact absolutism from mereology

One detail in the debate between Sosa and Lynch is that they agree that a non-relative scheme should be neutral towards varieties of seemingly true answers to the same question. Such a scheme cannot take sides between alternative true explanations of the same reality. I believe Lynch's argument against Sosa, that there can be no philosophically perfected abstract scheme which can conform to this criterion, is correct. Philosophical abstractions, if anything, create deeper conceptual disagreements. However, I believe Sosa had a point in his intuition that there must be at least some absolute facts. Without them, problems concerning mind-independent reality become severe despite Lynch's attempts to confront them by offering basic truths which are shared by every scheme (2002, 73).

Both Putnam's and Sosa's justificatory arguments illustrate somehow similar conceptual disagreements about objecthood. Imagine that we had proper names for each water molecule M^i constituting the piece of snow (P) in Sosa's argument. Both the snowball (B) and the snowdisc-ball (D) are definable through the conjunctive function

[$M^1 + M^2 + M^{3+}$ …]. If every molecule in Sosa's piece of snow actually represented a marble in Smith's and Johnson's bag, we could say that they are disagreeing about nothing but which conjunctions of marbles to call "objects" in both examples. In one case, we disagree about whether we should call [$M^1 + M^2 + M^3$] (a specific conjunction of frozen water molecules, also known as the snowdiscball) an object, in the other case we disagree about whether we should call X+Y (conjunction of two marbles) an object. This coincidence suggests that we should seek the underlying cause to conceptual relativity in the world of conjunctions and disjunctions. Perhaps the phenomenon of conceptual relativity might be emerging from the mereological structure of the world. Since there are enormous numbers of different conjunctions of marbles and we cannot refer to all of them with proper names, we make abstractions and invent concepts to refer to all the particulars encompassed by these conjunctions at the same time. Since there are multiple equally correct ways to make such abstractions, conceptual schemes are born. Thus, conceptual relativity might be a consequence of human beings' freedom to ontologically carve the otherwise ungraspable mereological structures in the universe, from fundamentally different but equally existent joints, which in turn can create equally coherent yet untranslatable understandings of these structures.

Take a world where only the most fundamental objects (and their representatives in language, subjects) and properties (predicates) exist, but not the mereological relations. The objects and properties in this universe have no parts and they do not make up wholes. In a language which is able to conceptualize these objects and properties, concepts and propositions that can indicate part/whole relationships would not be logically possible. In this language, "x is F" could be a meaningful proposition only if x

is a fundamental object and F is a fundamental predicate. My inclination is to say that such a language might not need to use conceptual schemes at all, because this fundamental layer of reality would exhibit no mereological structure allowing cognizers to carve it at different joints, and to conceptualize it in multiple correct ways. Instead, this world would have a single way to be carved. If this is the case, then concepts of this language would not be scheme-dependent, providing a prospective candidate for the non-relative scheme which Lynch rejects.[9]

Table 3: Visible light wavelength and the English colors.

-400 nm ----------Visible Light Wavelength----------700 nm-					
Purple	Blue	Green	Yellow	Orange	Red

Let me illustrate my argument, going back to the color spectrum case. As I proposed, we can define an object's color as the wavelength of light it tends to reflect. [10] The wavelength of visible light scales between 400 and 700 nanometers. We know that Bassa people prefer to carve this 300 nm spectrum into two different colors, while Shona people carve it into four. Let's say English-speaking people carve it into six for everyday purposes. The schemes do not vary solely by language, but sometimes by context. For all we know, a paint salesman might use a scheme that divides the spectrum into a hundred colors, at a precision rate that divides teal from turquoise, solely for business purposes. What then, could be a non-relative scheme to refer to the color spectrum?

[9] Note that I do not certainly claim that the non-mereological microphysical states of affairs can provide a sufficient subvenient factual base under the facts of physics, chemistry, biology etc., like David Armstrong would. I will later provide differences between my microphysical approach and the usual Armstrongian microphysical supervenience theory.

[10] I am aware that such a definition might be controversial for certain areas of philosophy, but the fact that it is still an alternative is enough for me to make my case using it as a framework for my example.

Imagine we divided the spectrum to very small lengths. If we do this enough, can we achieve the most fundamental length, or would we be able to split it infinitely? I should say that even today's incomplete physics, in its cutting edge theories like quantum loop gravity theory or string theory, foresees a minimum possible length. Planck length is the smallest area possible in the quantum loop theory, and the order of magnitude of the oscillating strings in string theory. In both theories, speaking of smaller lengths does not physically make sense (Burgess & Fernando, 2007, 55). Thus science as we know today foresees a minimum possible length instead of infinite divisibility.

The American National Institute of Standards and Technology announces that the approximate value of planck length is $1{,}616 \times 10^{-26}$ nanometers.[11] This length is so small that the diameter of an electron is 10^{20} times larger. Now, if we divide the 300nm visible light spectrum into planck length, a very rough approximation says we get 200×10^{26} (200 undecillion) portions. Bassa language spared two names for the colors. Shona spared four. I do not know how many names there are to refer to colors in English, but let's say there are a hundred at the disposal of the paint salesman. But what if we had a name for each 200 undecillion planck length portions of the color spectrum? Now it does not make sense for a language to have 200 undecillion concepts to refer to colors for practical purposes, but it is certainly conceivable. Just by assigning numbers to each planck length portion of the color spectrum, we could have a name for each one. We could say "the color of this light ray is color number x", x being a 29 digit number, and it could be true. At this point, I believe we would get our much-sought absolute conceptual scheme of colors. Two hundred undecillion names is sufficient to create a

[11] Value taken from the NIST Reference on Constants, Units, and Uncertainty by National Institute of Standards and Technology.

language which uses an absolute scheme of colors. Note that each color in this theoretical scheme is indivisible, since the precision rate of the scheme is 1 planck length, and there is no smaller length. If science moves on and discovers that the smallest length is actually smaller than planck length, it does not affect my argument, since we would simply need more names. On the other hand, I should admit that one major defeater to my argument would be the a possible scientific discovery of that the mereological chain is infinite to the direction of micro objects, meaning that there will always be a smaller length or object (much like in math that there can always be a higher number). Furthermore, any philosophical account (for example, a philosophy of physics theory) that postulates such a microphysical mereological infinitude will be in conflict with my theory, and possibly any other microphysical supervenience theory too. Nevertheless, postulation of a smallest length in all major theories of microphysics is a fact supporting my argument.

If we are able to achieve an absolute scheme of colors, through similar processes, it should be conceivable that we could achieve an absolute scheme regarding other objects or properties. To do that, as a general rule of thumb, we need to divide each object or property into its parts, until such point that we reach to the indivisible parts. For artifactual objects like a snowball, I expect these parts are the smallest, indivisible particles. The name given to this particle in the string theory is the string. On the other hand, science might develop to discover that they are actually not strings but some other entity. Indeed we cannot even imagine observing these particles even through the tools at the disposal of today's physics and possibly with the methods we develop in the near future too. Yet the theorized possibility of these particles is sufficient for me to defend

my position. Scientists might someday manage to prove the nature of the smallest particles, and we might even achieve the completed physics.which can describe their nature. Until that day my philosophical theory should be safe.

On the other hand, speaking of completed physics and the smallest particles should bring one significant philosopher to anyone's mind: David Malet Armstrong. I believe the conceptual tools and philosophical theories provided by him are invaluable for my thesis, and my theories concerning CR and FR benefit a great deal from his understanding of metaphysics.

2.3 David Armstrong and truthmaker supervenience

The well-known ontology designed by D. M. Armstrong has parallel claims about absolute facts, if not absolute language. He defends his truthmaker theory as an improved version of the correspondence theory of truth, which means that he also endorses metaphysical realism and truth realism (2010, p. 61). He follows David Lewis' supervenience physicalism, defending that everyday facts supervene upon the facts of ideal physics. The usual facts supervene upon the facts of ideal physics, the hypothetical completed science, which deals with the smallest objects and their properties, meaning that these two layers of facts are in a relationship of entailment (1997, p. 11). A few principles guiding Armstrong's supervenience theory are critical to this thesis too.

First of all, the relation of entailment is defined in Armstrong's theory as follows. "Suppose that a true proposition p *entails* a proposition q. By truthmaker Maximalism p has a truthmaker. According to the Entailment Principle, it follows that this truthmaker p is also a truth-maker for q" (2010, p. 65). Secondly, Armstrong argues that such a

supervenience indicates not only one-to-one relations but also one-to-many relations between truthmakers and truthbearers. It means one truthmaker can entail a plethora of supervenient facts, as well as one supervenient fact, can be entailed by a multiplicity of truthmakers. Lastly, if one pursues the end of the entailment chain, she will probably find microphysical facts. He argues that physics might be the fundamental science, and physical properties like mass, charge, extension, duration or space-time interval could be the real monadic universals (1989, p. 87). The very basic truthmakers which entail the rest of the world could be those basic microphysical truthmakers.

If we apply the Armstrongian truthmaker supervenience to the context of conceptual/factual relativity, I believe we can maintain a version of FR which explains the dualistic picture where there are absolute and relative facts. The Armstrongian kind of realism is a strong candidate for combining with CR. With it, we can say a relative fact that makes the proposition "there is a snowball in front of me" true supervenes upon a multiplicity of absolute truthmakers. Furthermore, a very similar multiplicity of truthmakers that makes "there is a snowball in front of me" true can also make "there is a snowdiscball in front of me" true. At the very least, the multiplicities of truthmakers which make each proposition true partially overlap. Ergo, the Armstrongian supervenience theory might explain the possibility of multiple true and multiple false answers to the same question. Let me explain this in detail. However, I will also need to make some modifications in the Armstrongian theory every now and then, in order to combine it with mine.

Let me begin with my major reservation. There is highly probable that Armstrong would find the idea of fact relativity implausible. As a physicalist and

naturalist, his usual perspective regarding facts is that they should be mind-independent. While adopting Armstrongian microphysicalism, I will still maintain that the overwhelming majority of the facts regarding our life are relative. The mind-independent portion of the factual world only consists of the facts involving monadic particulars or monadic universals, as Armstrong refers. On the other hand, my idea is basically that, if we merge Armstrongian microphysicalism with CR, we are able say that the proposition "there is an object x in front of me" is made true both by (1) conceptual scheme in which the proposition operates and (2) the monadic objects and monadic properties of ideal microphysics which composes the states of affairs of the object being in front of me. The former is the mind-dependent and scheme-relative part of the fact while the latter is the non-relative, absolute truthmaker part of it. The relative part of the fact would prevent just any entity from being an object (the explosion scenario of Sosa) with respect to schemes. The non-relative part of the fact would provide the grounds for the metaphysical realism with a mind-independent portion of reality and the truth which they strive for. Therefore, a reconciliation of CR and the realisms could be possible.

To further apply this theory to Sosa's snowball example, I believe the disagreement about objecthood of the snowdiscball is actually between different ontological carvings of the overlapping fundamental objects constituting the piece of snow and the snowdiscball. It can be reconciled by proposing that both of these perspectives are made true by partially overlapping sets of fundamental truthmakers. I believe strings (or whatever the ideal microphysical objects are) and their properties (mode of oscillation as today's physics propose) which make up the snowball, are parts

of the fundamental truthmakers. Alternative schemes can choose to classify different constellations or permutations of these strings as *objects* or not. The important part is that if we had proper names of each string which constitutes the piece of snow, then conjunctive functions can be used to define the particular object snowball (B: $S^1 + S^2 + S^3 +$…), snowdiscball (D: $S^1 + S^3 + S^5 +$…), or any permutation of these strings. We know that a finite number of strings constitutes the piece of snow, and a subset of these strings constitutes the snowdiscball. Thus if we had a name for each string, we wouldn't need to 'carve' the reality and make conceptual classifications like *object* to be able to refer to some of these permutations of strings in order to communicate. Much like when we have a proper name for each monadic color in my previous example regarding color spectrum, we would have proper names for every single snowdiscball-like entity which is convergent with the snowball. This would remove the need to communicate through abstractions. Such is the scheme-independent language of the ideal physics that I imagine, which I will analyze in more detail in Chapter 3.

Thus, I believe Armstrong's ideal physical realm provides the much needed ground for the absolute truthmakers and also potentially *the single true story of the world*, a possibility rejected by Lynch's metaphysical pluralism. As I mentioned before, not only objects but also properties and relations possess a mereological structure, although we need schemes (in this case different sciences) to interpret each layer of this mereological realm. Take the fact that "H_2O is a water molecule". It is the molecular properties of H_2O (like the laws governing two H atoms' binding with one O atom) that make it an H_2O molecule. But physics suggests that facts describing molecular laws supervene upon the facts describing the atom (e.g. laws governing the orbital behavior of

electrons) which makes it possible for H and O atoms to bond in the first place. Furthermore, facts about the orbital behavior of electrons supervene upon facts of quantum physics. This hypothetical chain can be projected to the smallest realm (the ideal microphysics) and the objects that I referred to here as strings. Therefore, not only can molecules be constituted by strings, but molecular properties can also be constituted by ideal physical properties. Properties (predicates) can be supervenient as well as objects (subjects), enabling this hypothetical language to conceptualize subjects and predicates which are not scheme dependent. The absolute facts Sosa looked for could be the facts of this language. All the other conceptual schemes could supervene upon the non-relative scheme this language uses. There could be multiple true schemes which conform to this ultimate scheme, and also false ones which do not.

2.4 Microphysical fact supervenience and factual relativity

I prefer to think about the relation between the subvenient microphysical truthmaker, the mind-dependent conceptual scheme, and the supervenient relative fact as a relationship of encryption and compression. Today's computers use compression software (like Winrar) to be able to store the same information in less space. Similarly, I believe humans need to compress the immense information provided by reality to take less space during communication. The mind-independent reality provides the microphysical, absolute information in the form of fundamental objects, properties and relations. Concepts and language in general are used to transmit information. But since the reality is immensely complex we need to compress its information with respect to our schemes, take shortcuts, group and order it to best of our ability. For example, we cannot carve the colors into 200 uncentillion concepts, so we take the shortcut and order the relevant

property (wavelength of light) into 8 groups. At this point, we have now encrypted the color spectrum with respect to a specific cryption key (the conceptual scheme). The choice of which key to use is arbitrary. There are completely useless keys, better keys or worse keys. Some keys work better compressing information regarding certain portions of reality, and others work better for other portions. Some provide precision, others provide practicality. In some situations it is just unanswerable which alternative key works better. We then use these encrypted messages to transmit the information. If the other person does not have the same cryption key, she will not understand the message. Luckily, these keys are available to most members of our society in a Wittgensteinean manner. We invent and disseminate our schemes in a communal effort, and are able share these schemes across individuals, so that most of our communication is actually effective. But every now and then we have disagreements over the exact cryption key to use; over which scheme is superior to the other; hence we get the disagreements that emerge the conceptual relativity as a philosophical problem of analysis.

On the other hand, this story of encryption and decryption is just an analogy that I hope will help describing my theory. Regarding the actual relationship between absolute and relative facts, I can say the supervenient relative facts are entailed by the mind-dependent interpretations of the subvenient, absolute and mind-independent facts with respect to conceptual schemes. What I mean is that if we are given the absolute facts and a conceptual scheme, we should be able to trace the relative facts that such duality entails. But what kind of an entailment is this? In *A World of States of Affairs,* Armstrong defines supervenience through the notion of possibility of existence. He says

"entity Q supervenes upon entity P if and only if it is impossible[12] that P should exist and Q not exist, where P is possible" (p. 11). Yet in my theory I should refrain from defining the supervenience between absolute and relative facts in terms of possibility of existence, because in our case it is the absolute facts PLUS the conceptual scheme that entails the relative fact. Take the absolute fact that *x is F*, which entails the relative fact *y is G relative to C*. If I followed Armstrong here, I would have to say if *x is F* the case and C exists, then it is impossible for *y is G relative to C* to not be the case. The problem here is that it forces me predicate a conceptual scheme with existence or nonexistence. I believe many such schemes exist in the minds of people and are the product of the collective intelligence of our species, and different ontologies assign different levels of existence to such entities. On the other hand, the existence of C is not a sufficient reason to relativize the proposition with C. It is possible for *y's being G relative to C* be not the case, even when *x is F* entails it under the interpretation of the scheme C, if the proposition is not operating in the scheme C (most likely due to the person who uses the proposition not framing the world relative to C). In other words, it is not sole the existence of C that entails that a proposition or fact should be relativized to it. The proposition should be operating C in order to be relativized to C, and if it is true, its factual counterpart is relativized to it too. Existence of a scheme is not the most relevant criterion of it with respect to its relation to a proposition or a fact.

Therefore, unlike Armstrong, and instead of defining the factual supervenience in terms of existence, I shall define it through a special case of logical entailment.

Microphysical Fact Absolutism:

[12] Armstrong takes this impossibility at the strongest level like it is impossible for 5+7 to be equal to 15.

$$Absolute\ Microphysical\ Facts\ \wedge\ Conceptual\ Scheme \rightarrow Relative\ Fact$$

Normally we think of logical derivations in terms of existence too. For example, when we say P→ Q we mean that if P is the case then Q is the case. P and Q refer either to propositions and their truth value, or facts and their existence. The first and the last part of my formula (absolute and relative facts) also refer to existence. On the other hand, the middle part (conceptual scheme) refers simply to choice. It means that if we refer to certain microphysical facts, and choose to interpret them with a certain conceptual scheme, it logically entails a certain relative fact. As I mentioned before, the choice among the schemes is arbitrary, since there are plenty of useful conceptual schemes. I do not want to get into the issue of regarding how this choice is made. It is sufficient to say that if we are presented with some absolute facts and a conceptual scheme to encrypt them, we should be able to deduce the relative fact, In other words, if the absolute fact *x is F* entails the relative fact *x is F relative to C*, then it does it together with the scheme C.

2.5 Natures of relative and absolute facts and the entailment relation

I believe I need to modify another very important portion of the Armstrongian philosophy to be able to maintain microphysical fact absolutism, and this might be the boldest step I take in this thesis. I cannot analyze a relative fact as a certain interpretation of an absolute fact with respect to a certain scheme, and yet claim relative facts are located solely out there in the world. In the end, I claim them to be logical interpretations. They should be not only mind-dependent, but also be mental, located in our minds, if they are logical interpretations. Traditional factionalism postulates the fact of the matter which makes the proposition "snow is white" true, as *snow's being white*.

According to Lynch, if *snow's being white* is really a fact, it should be mind-dependent, since according to CR neither snow nor white are mind-independent concepts. So the fact *snow's being white* is the case only relative to C. This can be interpreted as if Lynch is saying that facts *exist,* out there in the world, relative to C. This casts an awkward picture where what exists out there is relayed as a consequence of what happens in our minds. Lynch tries to maneuver around this picture (2002, 71). He assumes Fred Schmiddt's understanding of mind-dependence, which is "constitution by the mind in virtue of being represented by it". According to this understanding, an example of a mind-dependent object is Hamlet. Lynch claims he does not hold conceptual schemes as constituents of facts, thus he believes facts are not mind-dependent or mental. Facts are not on a par with Hamlet. He also refers in an affirming way to Sosa, who has noted that "to say that F's exist relative to a scheme is not to say that F's exist in virtue of that scheme". Thus according to Lynch, "mountains do not exist because of my scheme, they exist relative to it". This does not make sense to me, and I cannot help but think Lynch did not analyze the notion of relativity that well. In most cases of relativity, there is always a variable value that is relative. Take the relativity of speed. When a cat comes to me at a speed of 10 km/h in a train cart, its speed is 10km/h relative to me, but it is also going with 100 km/h relative to the ground. On the other hand, the Earth moves around the Sun at a speed of 30 km/s and the cat moves with it. The idea is that the speed of the cat is a relative variable value with respect to the reference frame. Now what does it mean — existence is a relative variable value? The variable value regarding speed can be a number, as it can be 10 or 100 km/h. Thus, speed can take the value of any number relative to the reference frame. But if we take one single fact and think about its existence as a variable, there are just two values that this variable can take. A fact can be

the case or not be the case (and if it is not the case, it is no fact anyway). The variable value of existence can be either 0 or 1. There is no third way around it. If existence of the entity A is relative to entity B, it means the entity A either exists or not, with respect to entity B. The story is similar with CR. In that case the truth value of propositions is the variable value, with respect to schemes. CR dictates that a proposition is either true, or not true, depending on the scheme. There is no third value regarding the case of truth of a proposition either. This is the core idea of Lynch's doctrine of CR. Why then, would we accept a different story in the case of FR? Lynch and Sosa explain what they do not want to imply when they say a fact is relative to a scheme. They do not want to say facts exist depending on schemes, because this would imply the world (if made of facts) would not exist without minds, since schemes would not exist without minds. In that scenario FR would be incompatible with the realisms. But I do not think they inquire enough in what story they wish to tell, by fact relativity, if not facts' being dependent on schemes. They need to further analyze what they think *a fact's existence relative to a scheme* means, if it is not *a fact's existence in virtue of a scheme.* To me they look the same. On the other hand, I should recall Baç's position regarding the issue. As I mentioned before (sec. 1.2.3), he thinks that at least some portion of facts is located in minds. I am not sure if he commits to mind-dependence of facts, or if he thinks whether a fact about the world existed before minds. But Baç's narrative cannot analyze that the mind-independent portion of reality is also made of facts or states of affairs, since he too is a maximalist regarding FR. However, the at least partial relocation of facts from the outside world to minds enabled him to solve the problems haunting traditional factionalism regarding negative or global facts. I shall note that the same advantages

apply in the claim that I will make next, that the relative facts are mind-dependent and mental entities in that they are representations in mind.

I believe there is no reliable maneuver that could enable one to claim that facts exist relative to schemes, and then add that they are still mind-independent. Lynch once said that maintaining CR but not FR is a "having the cake and eating it too" attitude. To me, the attitude is exemplified when he says facts exist relative to schemes, but then claims it does not mean they exist in virtue of schemes. I believe such a maneuver is a dead end. This brings a conceptual relativist to a really tough situation. It is next to impossible to maintain CR without at least some kind of FR as I have argued in prior sections of this thesis. Now it seems that it is also difficult to argue for FR, without committing to mind-dependency of facts. My solution is that we should simply embrace the mind-dependency of relative facts, and leave the job to compose the mind-independent portion of reality to the absolute facts.

Suppose it is a fact that there is a tree in my yard. When I look at the tree in my yard, and propose that (p) "there is a tree in my yard", traditional factualism dictates that the immediate truthmaker of this proposition is (f) *the tree's being in my yard*. Armstrongian truthmaker theory extends factualism, and says that (f) is actually a fact that supervenes upon some basic, monadic, microphysical facts (let's name these as (F)). Now, Armstrong would claim that (f) is still a mind-independent fact, and even though it is supervenient to (F), (f) is still able to generate truth for (p) by itself. Furthermore, he claims that there is a state of ontological free lunch, where (f) and (F) are separate facts in a relationship of supervenience, yet (f)'s being the case implies no addition to what exist out there, or no addition of being, over (F)'s being the case. Also, Armstrong is

inclined to argue for a symmetrical supervenience thesis. In the case of mereological structures, he defends that the mereological whole supervenes on its parts, while mereological parts also supervene on the whole (1992, p. 12). In his understanding, while (f) supervenes on (F), (F) should also supervene on (f).

Baç criticizes the Armstrongian supervenience on the grounds that first-class states of affairs (if they existed in the first place) are not sufficient alone to infer second class states of affairs (2003, 15-17). He uses the situation of a checkmate on a chess board and the fact that "the black king is checkmated" as an example. He suggests that the subvenient facts regarding the checkmate situation should include "the configuration of subatomic particles making up the two players, the chessboard, and so on". He then proposes that we suppose a scientist who have developed the ideal microphysics, and who is able to communicate with an extraterrestrial being through electromagnetic waves, transmitting all the related microphysical facts regarding the situation of the checkmate. Baç's point is that this is still not enough for the extraterrestrial to understand the situation of the checkmate.

> Assume also that both the scientist and the extraterrestrial have independently developed the ideal microphysical science that Armstrong imagines. The scientist then transmits to the alien information about all the "base level" facts related to that particular instance of checkmate; that is, he describes the subatomic occurrences in the players' body and in the physical environment when White performs the move resulting in a checkmate. In that case, the alien would know all there is to know about the subvenient ontological base of the second-class state of affairs. Still, the extraterrestrial would not understand the second-class fact related to what humans call a checkmate because without the intensional elements of language and an understanding of the constitution of our phenomenal world he would be unable to grasp the event as an occurrence in a chess game. What is suggested here is not that the second-class entity is ontologically more than the subvenient base. Rather, the claim is that we do not immediately get the second-class states of affairs once we are given the first. If this is the case, Armstrong is mistaken in believing that his "no addition of being" argument is

> sufficient to show that the subvenient level yields the supervenient irrespective of semantics and our ways of conceptualization. (Baç, 2003, 17)

It seems to me that Baç is right in his reservations over Armstrongian supervenience, and this is why I developed my theory in a way that draws a line between relative and absolute facts. Like Armstrong I believe that second order (relative) facts are entailed by the first order facts. But our positions diverge on two major issues. Firstly, first order facts are not sufficient to necessitate the second order facts alone. The necessitation can only occur if the second order fact is logically deducible from the first order facts under the rules of interpretation posed by a certain scheme, the way I described in the doctrine of microphysical fact absolutism. Secondly, as I pointed out several times, I believe that the second order facts are logical entailments that exist in human minds rather than bare facts that manifest themselves in external world. Let me expand on these two points.

The first point is that the absolute facts can only entail relative facts if they are interpreted within a certain scheme. Armstrong thought that first order facts necessitated and entailed the second order facts (the supervenience thesis), and vice versa. I do believe that the entailment works only one-way. Take (F) as a first order, microphysical, absolute fact and (f) as a second-order, non-microphysical, relative fact. Even in the case that we are certain that (F) entails (f) with respect to C, we cannot say that (f) entails (F) with respect to C, like Armstrong. To illustrate, we can return to the color spectrum example where we had 200 undecillion colors in our ultimate color scheme. Assume that the conceptual scheme (C) divides these 200 undecillion different possible wavelengths of visible light (light with the wavelength between 400 and 700nm) into 20 colors, so that it orders us to call the first 20 undecillion different wavelengths (300-315nm) of visible light as purple. Imagine that we have one light ray, just a single photon, which

we can refer with a 29 digit number according to its exact wavelength through the absolute color scheme. We know that this wavelength is also between 300 and 315 nm, within the interval which is framed as purple by C. When we say "the light is purple", it will be true relative to C, because if we take the light's exact length (F), and interpret it with the rules provided by C, we can logically infer that the light is actually at a wavelength interval that is defined by C as purple, [13] thus it is actually purple. On the other hand if we knew the light's being purple (f) in the first place, even when we are provided with the same conceptual scheme C, we would not be able to infer the exact wavelength of this light ray (F). The entailment would work only one-way. Therefore, only absolute facts can entail relative facts with the rules provided by conceptual schemes. The entailment (and necessitation) process between the mereological structures I propose is not a two-way process like in Armstrongian metaphysics.

The necessitation between the absolute fact and the relative fact from which the entailment relationship emerges is still a *de re* necessitation. It is a relationship where microphysical facts and conceptual schemes necessitate the relative facts, ontologically. But unlike Armstrong, it is not a relationship where microphysical facts regarding ultimate objects and properties in the mind-independent reality necessitate facts regarding objects which are mereological constitutions of these ultimate microphysical objects and properties in this reality. In my case, microphysical states of affairs in mind-independent nature, together with conceptual schemes which are representations in human minds, necessitate the relative facts which are also representations in human

[13] Of course, we can just infer purpleness here but we need more microphysical information like the nature of the exact string and its oscillation that causes that particular light ray, to be able to say it is a light ray, since "light ray" is just a scheme-dependent concept. I did not go into more detail for the sake of simplicity.

minds. But it is still ontological because mental representations still exist in space-time. I might be parting ways with Armstrong on several issues, but I maintain the doctrines of physicalism and naturalism like him, in that I believe everything that exists should exist within the natural and physical world, and mental representations[14] (ergo schemes and relative facts) are not exempt from this criteria. This means that, if we completed science and tried very hard, I believe we could locate the quantum strings that, under the interpretation relative to a scheme, constitute a conceptual scheme. These strings are possibly located within billions of current and past human beings' brains which collectively made the effort to construct the conceptual scheme in question. But after all, the very concept of a conceptual scheme is a concept that is relative to a scheme. This relays relationships of the following sort as possible:

$$Microphysical\ Facts\ \wedge\ Conceptual\ Scheme\ B \rightarrow Conceptual\ Scheme\ A$$[15]

I am aware that this yields at an infinite regress problem where every conceptual scheme should be necessitated by another conceptual scheme. If microphysical facts (a) together with conceptual scheme (B) necessitates the conceptual scheme (A), then (B) should also have been necessitated by another scheme (C), creating the sort of a chain as following:

$$Microphysical\ Fact\ Set\ (a) \wedge\ Conceptual\ Scheme\ B \rightarrow Conceptual\ Scheme\ A$$

$$Microphysical\ Fact\ Set\ (b) \wedge\ Conceptual\ Scheme\ C \rightarrow Conceptual\ Scheme\ B$$

[14] Relative facts' being mental representations does not mean that any mental representation is a relative fact. Relative facts are distinguished by being entailed by absolute facts under interpretation via a conceptual scheme. If we take the propositions "there is a unicorn in front of me" and "there is a horse in front of me", we are able to say that the fact of the matter that makes second sentence true is entailed by absolute facts regarding the strings that make up the horse. There are no such strings for the unicorn.

[15] There seems to be an infinite regress problem regarding this idea of conceptual schemes' being entailed by quantum strings plus other conceptual schemes. I will come back to this in Chapter 3.

$$Microphysical\ Fact\ Set\ (c) \wedge\ Conceptual\ Scheme\ D \rightarrow Conceptual\ Scheme\ C$$

I admit that the regress seems puzzling, but I think it emerges from a point parallel to the regress problems regarding coherentist understanding of belief systems and language. A question haunting coherentist belief systems, for example, is that if every belief causally requires a prior belief, then where did the very first belief emerge from? One move is to define belief system where beliefs necessitate each other in a circular manner. Similarly, we can talk about a circular system of conceptual scheme as following:

$$Microphysical\ Fact\ Set\ (a) \wedge\ Conceptual\ Scheme\ B \rightarrow Conceptual\ Scheme\ A$$
$$Microphysical\ Fact\ Set\ (b) \wedge\ Conceptual\ Scheme\ C \rightarrow Conceptual\ Scheme\ B$$
$$Microphysical\ Fact\ Set\ (c) \wedge\ Conceptual\ Scheme\ D \rightarrow Conceptual\ Scheme\ C$$
$$Microphysical\ Fact\ Set\ (d) \wedge\ Conceptual\ Scheme\ A \rightarrow Conceptual\ Scheme\ D$$

This is just one move to solve the regress problem. On the other hand, the problem in itself does not devalue my position philosophically at the level of a defeater, since similar problems haunting other positions (coherentism) cannot devalue those positions to the same extent.

Thus at this point, it is safe for me to say that the ontological status and nature of second order (relative)[16] facts is entirely different from first order (absolute) facts. As I said, relative facts are mind-dependent and they are mental representations. If humans did not exist, relative facts would not exist either. The factual correspondent of the proposition "there is a tree in my yard" (F) is an entity not very different from the factual correspondent of the proposition "Hamlet is a man" (G). They are similar in that both F

[16] I will return to referring the first and second order facts as absolute and relative facts. If I used a solely Armstrongian terminology I would prefer not doing that, since Armstrong does not think second-order facts are relative, but in the holistic context of my thesis it is better to speak of absolute and relative facts.

and G are mind-dependent and mental representations. They exist in minds, and would not exist without minds. I do not also mean they are the same. The difference is that the absolute facts that (together with the adequate conceptual scheme) necessitate F are located in the mind-independent reality, while the absolute facts that necessitate G are also mental and they are located in minds.

To return back to the nature of relative facts, I am inclined to think if we search for the location in physical reality that these relative facts exist, we will find them where conceptual schemes exist. I also believe, though not directly linked to this issue, that in the terminology of conceptual reference (as opposed to propositional truth value), relative concepts also refer to similar mind-dependent entities, which are logical derivations emerging from mind-independent entities under the rules of interpretation of conceptual schemes. In other words, when we say "there is a tree in my yard", and if the concept of tree here refers to the object of tree, this object is found in perhaps that person's mind, as a logical inference. Trees do not exist in the outside world, only quantum strings do.[17] I daresay that the tree is in our head, and if humans did not exist then only constellations of quantum strings would exist, but not trees. Thus, only facts that are manifested purely in the outside reality are microphysical, monadic facts. We logically derive the tree from the strings under the conventional rules of interpretation dictated by some conceptual scheme we learned before.

Examples of microphysical, monadic facts could be (by today's physics) facts regarding strings and properties that belong to them. In string theory, strings can oscillate in many ways and each way produces a particle with its mass, charge and other

[17] Though this claim should not be taken as the absolute existence is homogenous.

properties determined by the nature of this oscillation. Armstrong posited that mass and charge could be some of the ideal microphysical properties. Current events in physics show that even they are not fundamental enough (since they are determined through oscillations of strings). If we continue to analogize string theory as our microphysics, the properties that determine which way a string exists (e.g. oscillation), should be absolute properties. If we predicate a particular string with such a property and make a proposition in the form of "x is F", then it is most likely that the fact corresponding to this proposition is an absolute fact that exists purely in the external world. I also expect spatiotemporal extension to be an absolute fact (determining dimensions and spatiotemporal location), because in the color example we were able to create an absolute conceptual scheme of color, which was actually a conceptual scheme of length, because it was defined in terms of wavelength.

To come back to Baç's checkmate argument, I believe these differences between the supervenience that I propose and that Armstrong proposes, enable me to evade Baç's criticism against the Armstrongian understanding of supervenience. If, as Baç proposes, the physicist transmits solely the information regarding the strings that constitute the scene (chessboard, the pieces, players etc.) along with the monadic properties of each of these strings, the alien will indeed still not understand the situation of a checkmate. This is because the fact of the matter that makes the proposition "the black king is checkmated" true exists in the physicist's head as a relative fact, a mental representation. Without the scheme, the alien cannot infer that relative fact. However, as a naturalist and physicalist, I mentioned that I believe that the basic entities in nature that we refer, when we refer to conceptual schemes, are also nothing but quantum strings interpreted with

respect to other schemes. Thus I believe schemes can also be transmitted through the physicist's method of choice, electromagnetic waves or whatever else. If the alien receives the relevant rules of interpretation (conceptual scheme), then it can infer the situation of a checkmate.[18] If we merge this situation with my case of color, we can say that the alien scheme for wavelength of light divides the visible spectrum into 500, and the human scheme divides it into 100. If the physicist transmits the 29 digit number in the absolute scheme to the alien, that color will still not be purple for it, unless the physicist transmits the conceptual scheme regarding dividing the spectrum into 100 and giving it names. If we do transmit that scheme, even when the alien uses different symbols to refer to the wavelength of light that we refer to and symbolize (in Latin alphabet and English language) as the color purple, the two languages will just be interttranslatable in a Davidsonian manner. As I said, the transmission of that scheme will still be at the base microphysical level, since that rule too exists as information stored in brains and other human tools that is able to store conceptual information, in collections of strings. Some might notice that in my version of the checkmate argument, transmitting the scheme alongside the microphysical facts is such a pointless action by the physicist, since if she is able to transmit schemes, she could solely transmit the proposition "the black king is checkmated" and the scheme, and the alien would still be

[18] Wittgensteinean conceptual relativists might object to this idea, in that Wittgensteinean worldviews (which they believe to be conceptual schemes) might not be entirely propositional. To such an objection I need to remind that from a physicalist perspective, Wittgensteinean worldviews must exist in physical nature, in our world, ultimately as strings. The microphysical location of them might not be entirely mental. Microphysical facts that necessitate a conceptual scheme may exist in strings in human beings' minds that comprehend that scheme, but schemes possess a communal, cultural existence in other locations besides minds too. For example, strings that necessitate a conceptual scheme may be located in strings that compose a dictionary, that compose the internet, or other possible locations where humanity is able to store information. But as long as a worldview exists, it should ultimately exist in the form of strings. This is the physicalist principle I commit to, but do not defend since it exceeds the scope of my thesis. And if schemes exist in the form of strings, the hypothetical microphysical language should be able to transmit them.

able to understand it. I do not reject this pointlessness, but it does not conflict with my point that we could communicate its microphysical factual and conceptual schematic components, to transmit a relative fact. For all I know the physicist's aim could solely be testing my hypothesis with this experiment.

Now, I am aware that the absolute and relative facts I propose are entirely different in nature that we might even not prefer considering the relative facts as genuine facts. In the end some of us would prefer that all facts would have the qualification of being located in the outside world, independent from any mind. Only the facts which would persist in existence in case of an apocalypse, which would remove all the intelligence and minds from the universe, could be considered as real facts. We might prefer referring to relative facts as logical derivations instead of calling them facts. I admit that this is a matter of literary convention, in that it is a matter of schematic choice that philosophers may choose whether they wish to refer to the entities what I refer as relative facts, as facts. But I chose referring to them as facts in this thesis, since it enables me to talk about the proposition "there is a tree in my yard" to immediately corresponding to the fact *there being a tree in my yard*. If *there being a tree in my yard* was not a fact, then the proposition would have to correspond to something other than a fact, which would be an even more complicated situation to describe, especially when I think about this thesis' goal of a reconciliation between metaphysical realism and conceptual relativity. I am also aware that grounding my theories in incomplete physics and theoretical microphysical facts is a risky move, because we can barely speak of them. This is why I had to analogize and illustrate my theory with the findings of string theory, but for all we know string theory could be wrong too. It is even possible that the

microphysical facts do not possess the traditional *x is F* form. Mine is perhaps a Kantian move in that it postulates a noumenal realm which we can almost not speak about, but nonetheless is a realm that constitutes the very foundations of our universe. On the other hand, I do not think this makes my theory a less viable alternative, since as I defended that there no other alternative that can distinguish the mind dependent and independent portions of our facts. Lastly, I admit that microphysical supervenience itself is a controversial doctrine which is open to a great deal of criticism. Although I based this thesis on a mild version of it, defending microphysical supervenience in itself remains beyond the scope. I do not believe it possesses more problems than any other theory that commits to microphysical supervenience solely due to committing the microphysical supervenience. If anything, its using a milder version of supervenience helped me to evade at least one criticism from Baç as I defended.

Despite committing to controversial principles and a specific understanding of realism, I believe I did offer an alternative story of reconciliation between CR and metaphysical realism in this chapter. I believe my theory offers an answer to the question of why facts seem to be relative to schemes. Unless we can complete physics one day and speak the ideal microphysical language, every correspondent factual counterpart of every propositions we are able to use in any time is indeed relative. But I believe my approach still provides a ground where we can base the mind-independent reality in absolute facts. The mind independent reality consists of mind-independent, absolute, microphysical facts which we later carve and frame with respect to our schemes. This way, my theory enables us to maintain metaphysical realism. The next chapter will attempt the same for the truth realism and correspondence theory of truth.

CHAPTER 3

MICROPHYSICAL FACT ABSOLUTISM, TRUTH AND THE ABSOLUTE LANGUAGE

3.1 On the very idea of a conceptual scheme, again

In *Truth in Context*, Lynch devotes a few chapters to developing an elaborate understanding of conceptual schemes which I have found to be fruitful. In his second chapter he compares three alternative approaches to conceptual schemes: the Kantian, Quinean and Wittgensteinean models. He uses four variables to analyze the differences between these approaches: the primary components composing the schemes, the criteria of identity for the schemes, the prerequisite of analytic/synthetic and related distinctions and the structural nature of the scheme. In his interpretation of the Kantian model, schemes are mental entities, which are identified via their *categorical* and *formal* concepts in Kantian jargon (two schemes are identical if and only if they share the same categorical and formal concepts), and which possess a fundamentalist structure in that some concepts (e.g. categorical concepts) are central and fundamental to the schemes. In the Quinean model on the other hand, schemes are basically different languages, which are distinguished through non-intertranslatability, and which exhibit a coherentist web-like structure. Finally, Lynch describes the Wittgensteinean approach, which he favors, as a model where schemes are analyzed neither as merely mental entities, nor different languages, but simply as "networks of general and specific concepts used in propositions we use in language and thought" (sec 2.4). In this model, schemes differ when they do not share the basic concepts that are essential to grasp a large extent of other, more

specific concepts. According to Lynch, the Wittgensteinean model relays the nature of schemes as not absolutely a foundationalist model like the Kantian one, where some concepts are absolutely necessary for other concepts to exist. But yet there is a mild foundationalism in this model too, in that some concepts are more essential and central to some schemes (but not all) in different contexts.

Lynch argues that Davidson's criticisms which are able to refute the Quinean model cannot reply to the Wittgensteinean model (1998, p. 49). Davidson, having a Quinean model of schemes in mind, indeed attacks the idea of non-intertranslatability and incommensurability between different schemes. Since Quine defended schemes to be different languages, Davidson's argument for translatability between languages stood well against Quine's understanding. The Wittgensteinean model, however, gets rid of the black and white, highly contrasted, rigid view of schemes and introduces a flexible understanding of different schemes. In this model, schemes are worldviews and not necessarily languages. Different languages might exhibit very deep schematic differentiation, and lingual and cultural differences between agents might correlate with schematic differences, yet we have schematic differences between people speaking the same languages too. Moreover, even a single person can use different schemes regarding the same concepts in different contexts.

Furthermore in his third chapter of *Truth in Context*, Lynch favors the Wittgensteinean understanding of concepts as fluid, non-absolute, changing entities, as opposed to the Fregean understanding which takes it as crystallized, static entities. In Lynch's understanding, two people can share a minimal understanding of a concept and communicate easily within a context which enables them to make use of the minimal

concept, yet they can extend their understanding of this concept in diverging ways that can cause disputes and hardships in communication. Lynch did not mention this in his book, but I take the Carnap and the Polish Logician case a generic situation, where this minimal/extended concept dichotomy manifests itself. If we return to the case where we had three marbles (X, Y, Z) in a bag, it is noticeable that the dispute in Putnam's justificatory argument on whether X+Y is an object or not actually emerges from a disagreement between diverging extensions of the concept of object which are being employed by Carnap and the Polish Logician. The Polish Logician extends the concept of "object" to incorporate sums like X+Y and Carnap does not. Yet they must share a minimal understanding of the "object", since they would both agree on the truth of the proposition "X is an object". This agreement should emerge from a mutually shared portion in their criteria regarding what makes an object, a mutually shared minimal understanding regarding the concept of object, that I would expect to be involving some basic concepts like individuality, extension, mass, spatiotemporal existence, and so on.

Lynch's point is that we do not need to look for only completely alien, incommensurable languages which we cannot translate into each other, and where the users of them are blocked from any kind of lingual communication with each other permanently, to locate schematic differences. Two people can share a portion of an understanding of a concept, yet diverge in the extension of it. They could use the same language, communicate one proposition in a context involving a specific concept and not have a schematic problem, yet communicate another proposition in a different context using the very same concept, and experience a dispute emerging from a schematic disagreement. And it is not as if Carnap cannot comprehend what the Polish Logician

understands from the concept of the object. The Polish Logician may well communicate his understanding to Carnap and it should be easily graspable for him, as both of their understandings were easily grasped by us who read about this dispute here. The schematic divide, however, is not located where two people cannot translate or transmit conceptual understandings between each other, but is located where they simply prefer not to employ each other's' understandings of that concept. I have previous arguments concurrent with Lynch and Sosa, in that there is no absolute way to choose between these understandings, and we cannot say that a party is using a wrong scheme. Furthermore, in my color spectrum case we had single persons who use a more precise scheme or a more practical scheme regarding colors whenever necessary. A paint salesman, for example, might use a scheme with 100 distinguished colors at work and another scheme just with 10 at home. There is not even a translation or communication issue here, since this is only one person. Even then we are able to locate schematic differences across the schematic preferences of this person, and it looks as if different schemes might be more suitable for different purposes.

All in all, I take the Wittgensteinean model that Lynch presents and develops in *Truth in Context* as perhaps the most elaborate model regarding conceptual schemes. Since it also allows precise evaluations of my own cases (such as the color spectrum case) in this thesis too, I will take that model as a base to build my own arguments in the rest of this chapter, while I might still specify disagreements with it on a few issues later on.

3.2 The argument for microphysical concept absolutism from mensurability

In Lynch's works and the other works regarding the theme of conceptual schemes, it is a common practice to start with the elaboration of the idea of conceptual scheme, and then get into related issues in metaphysics or epistemology. In my thesis, though, I needed to lay the Armstrongian microphysicalism on the ground before being able to introduce the notion of an absolute conceptual scheme. Yet to illustrate the color spectrum example in chapter 2.2, I also had to refer to the notion of the absolute color spectrum scheme. Thus, the complexity of interrelations between different parts of the story forced me not to follow a clearer-cut sectional structure but to talk about different phenomena when I needed, where I needed. Thus before talking about truth and truthmaking, I need to return to the notion of conceptual scheme, to explain exactly what it is in a scheme that is solely made of microphysical concepts that makes it absolute.

Let's have another flashback to the color spectrum case where we have English, Shona, Bassa and the Microphysical languages dividing the spectrum into 6, 4, 2 and 200 undecillion, respectively. I believe one can analyze what makes a scheme of colors which defines them via intervals of 1 planck length absolute, within both Wittgensteinean and Quinean jargon of conceptual schemes, but I will mainly deal with the former. My idea is that the relationship between the microphysical scheme and other schemes is such that they *somehow* share basic concepts, as in Lynch's Wittgensteinean understanding of equivalent identities, and they are *somehow* translatable as in the Quinean understanding of commensurable schemes. I am saying *somehow* because, to be precise, the relationship is not mutual. Other languages are translatable or mensurable in

the microphysical language, but microphysical language is not translatable or *mensurable* in the other languages.

As mentioned above, Lynch argued that two schemes' being identical means that they share all the basic concepts. These basic concepts are referred to concepts which are closer to the center of the conceptual network that consists a scheme, those which are lethal in the making of other concepts in that scheme. I provided possible examples of these concepts in section 3.1, but if we analyzed a whole language as a scheme, it would be a much harder job to locate each basic concept in it. However, in our case of an absolute scheme of visible colors, the structural diversity of related concepts within the network is much more limited, in that every particular color is similar (if not equal) to the other color regarding their Wittgensteinean centrality to the network and the worldview of colors. The concept of color itself on the other hand, as defined in the microphysical scheme in terms of wavelength of light. As I mentioned before (p. 40), I acknowledge that this definition might change in alternative conceptual schemes, but I do not take those schemes into account in this particular case for simplicity.[19]

Now, my claim is that any other conceptual scheme or language that defines color through wavelength share all their concepts –and not only basic but all concepts– with the microphysical scheme. Other schemes are not exactly identical to the microphysical scheme in Lynch's sense, because Lynch left out the idea that two schemes can share all the basic concepts, yet one of them might have extra ones. On the other hand, whatever concept you will have in a non-microphysical scheme of colors,

[19] I do not even take the colors black and white into account, since they are derivative colors (with white color meaning all kinds of wavelengths is being reflected by the source and black color meaning none), and it would complicate the example.

you will have it in the microphysical scheme as a conjunction. Remember in section 1.1.2 I argued that in the microphysical scheme we are able to have a proper name for every possible wavelength interval within the visible spectrum. So for a particular 1 plack length interval, we would refer to it with a value *n, n* being a 29 digit number. In such a language, we could assign a specific portion of the color spectrum to the English color "red", and define it through a conjunctive function like [$n \wedge n+1 \wedge n+2 \wedge ... \wedge n+x$].[20] We can do this for each and every other color that have ever existed in any language. We can even use discontinuous functions like [$n \wedge n+5 \wedge n+29 \wedge ... \wedge n+x$], to define odd colors in odd schemes like the color of the flag of the USA (consisting of several discontinuous intervals of the spectrum). Hence, we have all the colors that any other scheme possess in the microphysical scheme. In Table 3, you can notice that such a relationship exists between Bassa and English too. For example, we can define the color *ziza* as the conjunctive function $purple \wedge blue \wedge green$. It seems English shares all the concepts of colors that are in Bassa in forms of conjunctions of its own color concepts. This again does not mean they are identical in Lynch's sense. Actually it makes good sense that these schemes are not identical, since the color scheme of English is more precise and one can express many more propositions in it. I would like to remind that in the first chapter I have argued that one cannot say "the sky is blue" and "the sky is *cipsuka*" and expect to express exactly the same idea regarding the portion of reality that makes the color of the sky (pp. 10-12). The same idea applies between the colors blue and *ziza*. The proposition "the sky is blue" expresses a more precise idea, in that it

[20] I should note that in this argument and the previous ones involving conjunctions of microphysical concepts, I will simply assume that conjunctions of concepts make new concepts.

implies the sky being not purple nor green too, compared to the proposition "the sky is *ziza*".

Table 4. Types of commensurability

	-400 nm ----------Visible Light Wavelength----------700 nm-																							
Bassa	*Ziza*												Hui											
Shona	*Cipsuka*				*Cicena*								Citerna				*Cipsuka*							
English	Purple				Blue				Green				Yellow				Orange				Red			
Language X	1				2				3				4				5				6			
Microphysical Scheme																								

Let's gather some more spectrum cases under one table as seen above. What does this color spectrum story as a whole tell us about commensurability then? First of all, we have seen completely incommensurable schemes (e.g. Shona and English). Also, there are completely commensurable schemes, where the carving and framing is identical but only the symbolization is different (e.g. English and Language X). The more confusing is the case where the colors in one scheme can be defined through conjunctions of concepts in another scheme (Bassa and English), and the microphysical scheme seems to have that kind of relationship with any other existing scheme. Does this relationship count as commensurability in Quinean or Wittgensteinean terms? Well, I believe when we use the terms commensurability or translatability, even under the context of the philosophical literature regarding conceptual relativity, we still want to relay some kind of reciprocity. In the context of conceptual schemes, this reciprocity is such that if

language A is commensurable with language B, then every concept in a language or scheme A should be translatable to a language or scheme B; and every concept in the language or scheme in B should also be translatable to the language or scheme A. I feel that Lynch also has a similar reciprocity in mind when defining two schemes' being identical via their sharing of every basic concept. What happens then, when scheme A possesses every concept there is in scheme B, yet scheme B doesn't possess some of the concepts in scheme A? Are these schemes still commensurable? In Lynch's exact definition, they should not be. Yet as we see, a great degree of *sharing* between schemes can still occur in such a way that scheme B becomes a subset of scheme A, like Shona colors are a subset of conjunctions of English colors. Is there some kind of commensurability in this kind of non-reciprocal relationship?

Since the term commensurable etymologically implies a reciprocal relationship through the *-co* prefix, I believe the clearer term to use here is to be *mensurable in*, which implies a one-way relationship. It would be more precise if we said the Bassa scheme of colors is mensurable in the English scheme, but not vice versa. This kind of relationship is what exists between the absolute scheme of colors and the other schemes. Any other scheme of color is mensurable in the absolute scheme. This relationship is also what I expect to hold between the absolute microphysical scheme or language and other non-absolute schemes or languages.[21] English is mensurable in the microphysical language, yet the microphysical language is not mensurable in English. Since the mensurability is not reciprocal, they are not commensurable. I believe this is still what

[21] I am aware supporting my arguments mainly with the case of color spectrum scheme, and then claiming all the schemes and languages exhibit the same structure is a major and possibly illegitimate jump. Yet analyzing several schematic examples would take space at least equivalent to a Ph.D. dissertation. Thus I still take this thesis to be rough introduction to the idea of microphysical fact absolutism.

makes the microphysical language absolute. Every other scheme is mensurable in the microphysical language, and there is no second language like that.

Notice that in second chapter of the thesis I defended that the microphysical factual supervenience is a one-way supervenience, unlike the Armstrongian understanding of it. Only microphysical facts exist independently of the mental, and only they can be subvenient to the second-order facts. Only they, together with the conceptual schemes, can logically necessitate the supervenient, non-microphysical facts. I take this as a *de re* necessitation is between quantum strings in the mind-independent reality and quantum strings consisting mental representations, and it seems to me that the one-way *mensurability* relationship between the microphysical concepts/schemes/language and non-microphysical concepts/schemes/languages as the *de dicto* manifestation of the same reality. Also, the one-way *mensurability* between the absolute scheme and the relative schemes is the underlying cause why, in Baç's case that I have analyzed in section 2.5 of this thesis, that he thinks we can communicate the microphysical facts regarding the checkmate situation but the alien will not understand the concept of "checkmate", unless we provide it our conceptual schemes too. The underlying cause is that the microphysical language will not be mensurable in the alien language without a scheme to carve and frame it. But I want to express again that, if we provide the microphysical facts to the alien without providing the scheme that makes it a "checkmate" situation, I do not think any kind of information about the situation will be left out, except that a certain scheme calls this specific constellation of strings in the world a checkmate situation. Anything other than that, any related piece of information that comes to mind regarding a checkmate situation, from the rules governing a chess

game and when exactly checkmate happens, to historical and cultural dispositions or themes related to two players that plays chess, and anything else, is transmittable via the microphysical language. This is of course, given the doctrines of physicalism and naturalism that this thesis commits. Let us, under the light of one-way mensurability of non-absolute schemes in the absolute scheme, re-quote Baç:

> …the extraterrestrial would not understand the second-class fact related to what humans call a checkmate because without the intensional elements of language and an understanding of the constitution of our phenomenal world he would be unable to grasp the event as an occurrence in a chess game. What is suggested here is not that the second-class entity is ontologically more than the subvenient base. Rather, the claim is that we do not immediately get the second-class states of affairs once we are given the first. (2003, 16)

Under the new light a significant problem arises here. Baç's claim in the last sentence that "we do not immediately get the second-class states of affairs once we are given the first" is correct, but this is not because we cannot transmit "the intensional elements of language" or "an understanding of the constitution of our phenomenal world" via transmitting microphysical facts. This would only be true if naturalism and physicalism were false doctrines. It is understandable if Baç thinks they indeed are, but I already am committed to them in this thesis. However, as I have also argued in the second chapter, it is correct that we cannot get second-class facts solely from first-class ones, and this is actually because the absolute facts cannot solely entail the relative facts. As a result, the propositions which correspond to first-class states of affairs that makes the "checkmate" situation in the absolute language, are not mensurable in neither English nor the alien language.

All in all, the ideas outlined above leads us to the doctrine of *microphysical concept absolutism*, the lingual sister of the ontological doctrine *microphysical fact absolutism* that I have analyzed in the second chapter.

$$Absolute\ Microphysical\ Concepts\ \wedge\ Conceptual\ Scheme \rightarrow Relative\ Concept$$

3.3 Microphysical concept absolutism and truth

There are several realist theories of truth. The most renowned ones among them commit to a fact ontology and idea of a correspondence between the reality and propositions. The popular version of the correspondence theory of truth dictates that propositions correspond to reality, more specifically to facts. Establishing the nature of such correspondence is still a literary work in progress. There are theories that explain this correspondence as identicalness, correlation, congruence, causality or structural isomorphism. In *Truth in Context*, Lynch analyzes every major understanding of correspondence theory and finds no conflict between any of them and CR (1998, sec. 5.4). I have argued previously that Lynch, by presenting all facts as relative in his theory, fails to explain how essentially all truth is rooted in the mind-independent portion of reality. On the other hand, I agree with Lynch that relativity of facts and concepts still leaves room for kinds of interpretation of the correspondence theory. I believe my expansion of Lynch's theory is still compatible with the correspondence theory, and it explains the mind-independent portion of factual reality better. Since I find Lynch's analysis satisfactory, I will not analyze each kind of correspondence I mentioned above and will stay neutral among them. I will simply speak in terms of propositions corresponding to facts.

In order to be able to speak about truthmaking relationships, let me begin with summarizing the conceptual tools we have at our disposal at this point. The first lingual tool we have is the relative concept, the kind that includes every concept that humanity will ever use until it develops the ideal completed physics. Additionally, we have microphysical concepts which can compose the conjunctions that are the *mensurations* of the relative concepts in the absolute language.[22] On the other hand, in the metaphysical plane (which is made of facts from a factualist's perspective), we have relative facts which are actually no more than mental representations in composition. But these representations are special in that they are logical entailments of the mind-independent, absolute facts, which are the last kind of entity we have at our disposal. If we have two kinds of facts and two kinds of propositions, then we have four possible pairs, which are kinds of truth, if we take truth as a correspondence relationship between a fact and a proposition. It seems that the relative fact and relative proposition pair is the most common kind of truth we come across every day. My theory takes relative propositions as functions of relative concepts that are put together through carvings and framings of world with respect to conceptual schemes, which are Wittgensteinean worldviews, in the form of *x is F relative to C*. Then what makes them true? Relative facts are the immediate correspondents of relative propositions that are true, and as I have mentioned, they are representations in mind. Thus, this kind of correspondence actually occurs between a mental representation (proposition) and another mental representation (relative fact). This means that without minds to represent the fact corresponding to it, the fact of the matter that makes the proposition "there is a tree in

[22] For example, if the conjunction of $F1 \wedge F2 \wedge F3 \wedge \ldots \wedge Fn$ (each F being a microphysical monadic wavelength) encapsulates the portion of the color spectrum that the English color blue also encapsulates, then it is a mensuration of the English color blue in the microphysical language.

my yard" would not exist, since without relative facts or schemes, the truth of relative propositions cannot directly derive from absolute facts. In terms of conceptual reference, the referent of the concept "tree" is also a mental representation that is carved-out and framed by human beings, by conceptual schemes, from the absolute referents (strings and their oscillations) that actually exist in the mind-independent world. Hence, the truth is generated when a relative proposition (p) that is composed of relative concepts corresponds to a relative fact (f). According to microphysical fact absolutism, the relative fact (f) logically derives from constellations of subvenient absolute facts (F) and a conceptual scheme (C) too. Now, if (p) is true, it is mensurable in the absolute microphysical language in the form of conjunctions of absolute propositions (P) and the conceptual scheme (C) to determine the rules of interpretation. One highly important rule is that the conceptual scheme (C) that would allow us to locate the absolute propositions (P) that the relative proposition (p) is mensurable within, should be one and the same conceptual scheme (C) that entails (f) from (F) under its interpretation. In other words, if I say "snow is white", the scheme that would enable us to locate the exact counterpart of the color white within the absolute scheme (in the form of [$n \wedge n+1 \wedge n+2 \wedge ... \wedge n+x$]), is one and the same with the scheme which, together with the microphysical strings that compose the snow, and its being white, entails the fact *snow's being white*. Thus truth is only generated when the scheme that relates the relative with the absolute facts, and the scheme that relates the relative proposition with the absolute propositions are the same. When schemes within which a person forms a proposition differ, truth might not occur. This might explain how a person can be false due to her own scheme. Everyone else might think that there is a tree in the yard, and they can be right, but that person does not define the tree such that this definition would include the

object that is in the yard. It also explains how the same proposition "there are 3 objects in the bag" can be true for one person, and can be false for another, while both of the propositions attempt to correspond to an actually existent set of strings, one of the schemes fails and the other does not. Other than that, truth also does not generate when there is no relative fact which the relative proposition immediately corresponds to, when there are actually no strings that can make up the mind-independent portion of the relative fact. This could be the case when no absolute facts (strings) exist, under the interpretation by C or any other scheme, to entail *the tree's being in my yard*. These two ways of truthmaking explain how certain propositions are true in one scheme and false in the others, and also explain how certain propositions are false in all schemes. This is more or less how correspondence theory of truth combined with my theories work.

There is also the pair of the relative proposition and the absolute fact. I believe while absolute facts cannot immediately correspond to relative propositions, they are in a close relationship. If a true proposition corresponds to a relative fact, the extent of absolute facts that this proposition can be related to is very limited, in that the proposition is not related to just any microphysical fact in the world. These absolute facts that the relative proposition is related to are those which entail the relative fact as the immediate correspondent, under the interpretation by the scheme that the relative proposition operates in. But again, the relationship between the absolute fact and the relative proposition is not *co*rrespondence, but perhaps *respondence*. When Baç offered his triangulation theory of facts (2006, 192) that I described in the section 1.2.3 of this thesis, he described the mind-independent reality as *the answerer*. In a parallel claim, I believe absolute facts *respond to* relative true propositions, given the conceptual scheme

that the proposition is relative to. This is why, relative or absolute, any propositional truth is rooted in the mind-independent reality. The existence of the relative fact is dependent on the existence of the absolute facts as much as the conceptual scheme. While the scheme makes the relative fact mind-dependent, the absolute facts make it outside-reality-dependent too. This is where my theory provides a better basis for realist inclinations in philosophy. In section 1.2.2, I explained how Lynch proposed virtually absolute facts to satisfy realist inclinations but failed in two ways. Firstly, virtual absolutes are subject to change over time. So the truth value of a proposition *x is F relative to C*, even when the proposition corresponds to a virtually absolute fact, can change in time. I, as a realist, find this too high a price to pay for Lynch's theory. In my theory, on the other hand, we get to have real absolute facts which *respond* to some of our propositions, making them eternally true, so long as the scheme of interpretation remains the same. If the scheme changes, then the proposition changes too, in that it changes from "x is F relative to C" to "x is F relative to D". Secondly, I have argued in section 1.2.2 that Lynch's theory could not explain how we share the simple reality of the sky's being blue. My theory explains this as the truths about sky's being blue and *cicena* derives from two different relative facts, which in turn are logical entailments of the pairs of the same constellation of absolute facts with two different schemes. We experience the same reality because we experience the same constellation of absolute facts, but pair them with different schemes, which in turn creates the relative facts in our minds. Thus, ultimately we experience the same immediate factual reality, we just carve it differently.

Now that we have dealt with how truth is generated every day, we can turn our attention to the less common pairs of truthmaking. There is the absolute proposition – relative fact pair, but I think it is a nonexistent entity. If someone can make a proposition in the microphysical language, I do not think there needs to be a mind-dependent intermediary mental representation (relative fact) to make it true. These kinds of propositions can be made true by facts that truly belong to the mind-independent world. Any proposition at a precision level representing the microphysical language should correspond to an absolute fact. This brings us to the last pair, of an absolute fact with an absolute proposition.

3.4 The absolute language and the single true account of the world

Committing to CR and their maximalist account of FR, pluralists like Lynch and Baç summarize the conclusion that their position brings about, with the idea that "there can be more than one true account of the ultimate reality" (Lynch, 2002, 58). This is the core idea of the doctrine of metaphysical pluralism (as Lynch calls) or pluralistic Kantianism (as Baç calls). I believe this doctrine would be a legitimate conclusion to arrive if one maintains their understandings of CR and FR. If all facts are relative, and the ultimate reality consists of facts, then there should indeed be different true accounts of the ultimate reality. Throughout this thesis I have evaluated several aspects of their arguments and theories, making the parts that I agree and disagree explicit. I have made it clear that I am not a maximalist regarding relativity of facts, and I offered my own theory about what kind of facts are absolute. I have provided different implications of microphysical fact absolutism in metaphysics in the second chapter, and in language in the third. One last implication left behind, and it is in immediate conflict with the

doctrine of metaphysical pluralism. I believe the kind of true stories that are composed of pairs of absolute propositions and absolute facts are indeed very strong candidates to construct the single true story of the reality, especially when it comes to the *ultimate* reality.

Let me begin with the disclaimer where I speak about a kind of language that is only hypothetical, and will remain so until the day our civilization completes microphysical science if such a day ever comes. The absolute propositions in these pairs are made in the absolute language which uses only absolute schemes. There is no logical or schematic intermediary between the propositions of this language and the facts that they correspond to. The absolute propositions in this language will still be mind-dependent, in that they exist in virtue of being represented by a conscious mind. The correspondent facts, however, will be absolute and mind-independent. It is not a coincidence that Lynch defines metaphysical pluralism in terms of the *ultimate* reality. From my factualist point of view, reality consists of mind-dependent and mind-independent facts. The most meaningful distinction between an *ultimate* and a non-ultimate reality, I think, should be between the kind of reality which would still persist in the event there are no minds left to comprehend it, and the kind which would not. Lynch and Baç defend that this kind of mind-independent reality might consist of facts. As I have mentioned previously, for Baç, this reality is some kind of *answerer*, but I take it that these answers do not come in the form of mind-independent facts, since he seems like a maximalist regarding FR like Lynch. Instead, perhaps the ultimate mind-independent reality is a noumenal realm that we can barely refer to (let alone postulating that it is made from facts), and this is why he titles his position as Pluralistic *Kantianism*.

Yet he is still open to the idea that the noumenal reality might consist of objects and properties. He explicitly says that "the Pluralistic Kantian interpretation I favor does not rule out that external (mind-independent) reality comprises structured properties or relations in/between objects" (2003, 26). However, I do not believe Baç would defend the idea that these states of affairs can ever sufficiently be truthmakers of our own propositions, since in a later article he claims that "the makers of, or conditions on, propositional truths are created jointly by minds/concepts and the mind-independent reality, and there cannot be any truths in a world uninhabited by linguistic agents" (2006, 187). Since I have defended that all truthmakers related to any proposition until we construct an absolute scheme is relative, Baç and I have parallel thoughts so far. But what he did not analyze is the possibility of an absolute language, which could refer to the noumenal reality without the schematic intermediary. On the other hand, as I have analyzed before, Lynch also tries to maneuver with his notion of FR, in that the idea that facts are relative does not mean they exist in virtue of being represented by minds. This is a maneuver that I have found problematic and criticized here (sec. 2.1). Lynch explicitly argues that his account is compatible with the basic metaphysical realism, the doctrine that there would still be a world without minds. But from my readings of Lynch, I did not get an explicit answer to the issue whether this mind-independent world is composed of facts. Nevertheless, I can confidently say that they both have their problems with a specific idea buried inside traditional fact ontology, that there are mind-independent truthmakers. One middle ground where I can meet with Lynch and Baç could be on an understanding of *ultimate* reality which refers to the mind-independent reality. On the other hand, contrary to them, within my account I am still able to maintain that it is composed of mind-independent, absolute, microphysical facts that can

also be immediate truthmakers of certain, very special propositions. The fact that they are unable to maintain this idea is another advantage of my position when it comes to the issue of reconciliation of CR and the realisms. Enabling absolute truthmakers gives an edge to my position regarding its compatibility with the traditional factualism.

As analyzed above, I do not believe Baç would claim that the fact of the matter that makes the proposition (p) "there is a tree in my yard" true would exist without minds, although he allows that the in-itself noumenal reality may also exhibit a propositional nature. Lynch might allow this, but it is problematic from my perspective. Furthermore, since the second chapter, I also agreed that this particular fact, referred in conceptual terms of a tree or a yard, would not exist without minds. My difference, however, was that I believe a constellation of absolute facts, which entail the relative fact of *the tree's being there in the yard* together with a conceptual scheme, would persist in existing, even without minds. *Trees* do not exist independently of minds, but quantum strings that compose them do, and they can exist in such a non-homogenous way that they make up the entity we call a "tree" instead of composing a stone, a cloud, or whatever. The *ultimate* reality that Lynch refers to is actually this reality.

Now, what we can do in the microphysical language is that we can define the tree in terms of a conjunction of monadic objects and their monadic properties that it is composed of. Since conceptual relativity emerges from mereological relations, the more we try to describe the higher layers of the mereological chain, the harder it should get because complexity increases. *The layers of reality* in the sense I use it here starts from the lowest layer which is the microphysical layer. If we analogize this layer with string theory, this layer consists of strings and their monadic properties. If we move to higher

layers, we will notice that the moves above may represent shifts and divisions in sciences that examine these layers. There is the layer of quarks, which is examined by quantum physics. Then comes the layer of atoms, examined by atom physics. Then comes the layers that are examined by chemistry. At this point the reality has already become much more complex compared to the microphysical reality. All our propositions in these sciences are already scheme-dependent, and perhaps paradigmatic differences in Kuhnian sense within science can actually be formulated as schematic differences in Wittgensteinean terms. Conceptual schemes in these layers come from the respective sciences. Above chemistry, we have the differentiation between beings with and without life. We have many sciences regarding lifeless entities in our environment, like Geology. For organic entities, we have sciences of molecular biology, which examines the layer beginning from what's going on inside the cells, to larger mereological entities of tissues and organs. Then comes sciences that examine the layer which consists of complex beings, like biology. If it is humans we speak of, we have psychology to examine behavior. At this layer we have human beings as the whole. Then comes social sciences which examine the layer that takes different constellations of humans as a whole, and the chain goes on. We have branches of sciences that take planets, solar systems, galaxies, or the empirically known universe as a whole.

Since there are major gaps between sciences, at this point, the language we use after the biological layer, but especially in social sciences, is bound to be heavily relative and imprecise. As we move above layer by layer, we come across with more complicated layers, and the schematic differentiation among us increases, because at some point more than one candidate is plausible when it comes to explaining the

information that is received by examining that layer. That is to say, I believe there is a correlation between what Lynch calls conceptual fluidity and the level of the layer of reality that the concept belongs to. Conceptual relativity comes in degrees, and the higher layers are much harder and complex to explain and conceptualize with less relative terms. The concept of "proton" for example, is much simpler compared to the concept of, let's say, "governmental corruption", because we need a mereologically simpler scheme[23] to analyze it. The proton is made up two up and one down quarks and gluons that bind them together, but the composition of governmental corruption is much harder to locate. Indeed, the gaps between sciences is so enormous that we cannot even begin to dream of analyzing governmental corruption in terms of physics (let alone microphysics). I believe here lies the reason why many philosophers find the idea of a physicalist reductionism implausible. Then again, as a naturalist and physicalist, since anything in this universe should be composed of quantum strings, I cannot see why a particular instantiation of the phenomenon of *political corruption* (e.g. political corruption in Turkey), should not. I believe that a completed science would be able to locate quantum strings that, together with a conceptual scheme, necessitate the truth of a proposition such as "there is political corruption in Turkey".

I do not however, advocate that we should be reductionists in all fields, since we should respect the limits of our cognition as well as science as we know today. For example, the spirit that was dominating the science of psychology in 1930's US, where scientists thought they could measure and quantify intelligence solely by testing the person in question. Actually in today's world probably the more rational perspective

[23] I do not however claim that the truths regarding these layers/sciences are easier to discover compared to higher layers/sciences. The scientific verifiability is independent from mereological simplicity.

would be always questioning even the most established of sciences. Yet, philosophically speaking, this should not discourage us from maintaining the doctrines of physicalism and naturalism. I believe that it is theoretically possible to define social events in terms of strings. But for example, I do not believe we are or we will be close to doing that. I am very skeptical of our ability of doing that as human beings with limited cognitive capacity. In that, my kind of reductionism is a theoretical reductionism. I also do not advocate that sciences should aim to explain phenomena in terms of their mereological parts. Biology, sociology or political science would be still valuable, even when we discover the ideal microphysics and bridge the gaps, because we can grasp the layer of reality that these sciences examine only via relative conceptual schemes. If the day comes and we complete the sciences, I do not think a human being, with its cognitive capabilities, will be able to make a true proposition that involves more than a few dozen strings. This amount is still immensely lower than even the amount that composes a quark. Therefore it seems to me that without the conceptual schemes, we will always be unable to refer to portions of reality which are significant to us.

However, I think there is the very interesting possibility that we can make use of the microphysical language, if we manage to construct it. I want to provide my own metaphor to provide a clearer understanding of the absolute reality and the absolute language. But let me begin with Lynch's own metaphor, as a sketch and a painting to refer to the ultimate and relative reality:

> Suppose that we are presented with a crudely drawn sketch —no more than a few rough lines. Imagine that we have two different artists "fill in" this sketch. In one sense, we would no doubt get two different pictures. Now suppose that we ask which of these pictures is the *real* painting of the scene in the sketch. Obviously, there can be no answer. Both and neither are. Similarly, ifı ask what is the sketch

> *really* a sketch of, we again cannot answer without appeal to a particular "filling in" of the rough lines of the sketch (whether real or only imagined). (Lynch, 1998, p. 72)

Thus according to Lynch, relative concepts are similar to paintings that we *fill in* from the sketches that the reality provides for us.

First of all, I want to ask that if paintings are concepts, what exactly are the sketches? Are they the referents of concepts (or the facts corresponding the propositions), or are these an entity which is less graspable than a fact, like Kantian noumena? On the other hand, the real lack of this metaphor is where it disregards the theme of complexity. It seems to me that the reality is much more complex compared to the concepts we employ to describe it. A tree as an entity belonging to outside world (or the constellation of strings that make it in my terms) is composed of a significantly greater amount of object, properties, relations between these objects, mereological parts and wholes etc., than any concept of "tree" that we can construct and fill in for it. In Lynch's metaphor, however, the more complex entity is the painting, compared to the sketch. If anything, the reality should have been a view of Florence from Piazzale Michalengelo, and the painters should have been making sketches of that view. The sketches would still be different and Lynch's metaphor would still work in other ways, and he would account for the theme of complexity too. But here lies what I believe to be an anthropocentric disposition that I find disturbing. I believe we get so involved with our constructions, our literature, our complex ideas, our discourses in humanities and sciences, that we fall under the false impression that our constructions should be more complex than the reality they represent. I think the same disposition occured when Sosa, in his snowball example, found the idea that of an explosion of reality puzzling. In his

example, he rendered the idea that every snowdiscball-like entity inside the snowball could be an object as unacceptable. For the ones who think like him, here is the bad news. *The reality is explosive.* There is indeed undecillions times undecillions discball-like entities inside the snowball, and I do not see why whether we call each of them objects or not should be related to rendering the reality as non-explosive again. The complexity here does not arise from our discourse, but it arises from the fact that there being that many quantum strings constituting the snowball, and a far more amount of conjunctions of these strings that we can freely choose to conceptualize or not. It is the reality and not our discourse which is *that* complex, and naming these undecillions of strings and their possible conjunctions is simply a matter of convention. I believe, once one accepts such a mindset, the idea that there are that many entities or objects inside the snowball becomes something less disturbing than what it is right now.

Let me finish this thesis with my own metaphor. Video games these days are highly realistic compared to twenty years ago. The most advanced of today's video games have their own physics engine, sound engine, artificial intelligence engine, behavioral analysis, lighting engine and even simulations of the human ability to learn; all to be able to represent the reality. Imagine you are playing the most advanced video game today, and imagine it simulates the D-Day of the Normandy landings in WW2. You are an allied soldier in an amphibious vehicle in the ocean, which sets course for the infamous Normandy beach. You can interact with entities in the boat, hold them to see what they are, and punch them to hear the sound they make. You can fire your gun and see the smoke it makes. You can talk with other people in the boat. For now, due to the limitations of today's computers, you can't feel, smell or taste things in the boat, but it is

only a matter of technological advancement. The point is that we have a computer simulation of a portion of the physical reality and this simulation transmits information from the makers of the game, to the players of it. Notice that the game has a physics engine. Coders define mass, gravity, density and other Newtonian laws in this engine. If you fire your weapon toward the ocean, you will see the ammo slowing down in the water, because the laws of physics is coded in such a way. Coders also define different sounds to the sound engine, hence there is a different sound for when you hit the steel material of the boat with your rifle, compared to the sound when you hit the wooden bench. Coders define human behavior with an artificial intelligence engine too. You will notice how nervous other soldiers in the boat are, simply from their expressions. The coders use different coding languages for each of these engines. The computer, however, does not cognize speak in the language of codes. It uses a more precise language, which is the binary language that is symbolized with the combinations of 0's and 1's. The precision of the binary language is at a more micro, and subvenient level. What goes on the binary realm directly necessitates the supervenient realm of codes, and each concept in the coding language is translatable to the binary language. In other words, the coding language is *mensurable* in binary language. But they are not commensurable, since binary language can potentially possess many more concepts that are not defined in the scheme of the coding language. All in all, while the computer processes the game in binary language and produces the simulation virtually, the monitor and speakers translate it in forms of light and sound. It is all a matter of science, technology the level of our accumulated knowledge, and it is a sure thing that we will make more realistic games as time goes by.

Now suppose that the time has come and we completed sciences. We completed physics, chemistry, biology, cognitive psychology, behavioral psychology, and any other science that we would require to fully simulate the D-Day. We now have the scientific means for a new, far more realistic video game. Further suppose that we have the technological advancement to process that huge amount of information with a computer. In this game we are again a soldier in the boat. This game will require immense processing power (by today's standards) to simulate the boat, because we will define every entity the boat in terms every microphysical object and property that entails it. Today's game uses pixels and resolution which define the smallest part of the surface of the boat. One pixel in the wall might be identical to one cm square of it, which is the smallest possible particle in the game. In the new game, one pixel will be identical to one quantum string. Each string will be defined in this game with its monadic properties, and microphysical laws of nature will also be defined. If we define each microphysical object, by *de re* necessitation[24] of the higher layer of the mereological structure by the lower layer, each quark, each proton, each atom, each molecule of the wall will be necessitated. The quarks and atoms will not be *additional being* in the Armstrongian sense in this game. They will not require additional coding, nor they will possess extra space in the hard drive of this computer. The atoms and molecules and tissues and humans in this game will just emerge and flow from the mechanics that govern the subvenient level. As I argued before, humans will need to use such concepts to refer to significant portions of reality, but computers might not need them one day, since they will have much higher computational capabilities. Therefore, the totality of the situation

[24] Remember that I argued for a one-way de re necessitation where absolute objects like strings can necessitate relative objects like protons but not vice versa. Similarly, mereologically, I believe the parts necessitate the whole but not vice versa.

of every string in the boat will be the totality of states of affairs in it. *The Ideal Microphysical Engine* of this game will be able to compose the totality of supervenient facts regarding this boat, and the game will not require separate physics, sound, artificial intelligence or other kind of engine since the microphysical engine covers it all. A human mind cannot even begin to grasp that amount of information, but the simulation might represent everything that happened in D-Day perfectly with the help of the information processing capabilities of a computer. The simulation will represent any event that took place in D-Day, from each photon that came from the sun, to each dust particle that arose when an artillery shell hit the ground, each micro movement in the air currents, even the gamma radiation that arrived from a distant star to the Normandy beach that day, or the neuronal activity inside the brain of each soldier. But do not get me wrong, it will not only represent physics. It will represent information regarding the emotional status or previous memories of the soldiers. It will even represent conceptual schemes that can be located inside the brains of soldiers or the books they read as strings. It will represent each and every bit of true information of any kind we can think of regarding that day. And the computer will transmit information to humans as simply making them a part of the simulation through a Matrix-device, the renowned device of our "Brain in a Vat" examples in philosophy, directly plugged into brain, which is able to induce any kind of sensory information in the brain.

The most important point of this metaphor is that this perfect simulation, afterall, will be processed in a language by the computer. Today's computer uses the highly precise binary language to construct the rough simulations we have. The quantum computer will have to use the most precise language in order to represent microphysical

affairs and that layer of reality, which can only be the microphysical language. Here lies the entire tension between Armstrong and Baç. In Baç's example, I sided with him against Armstrong and argued that the alien cannot grasp the checkmate situation without the respective scheme, and here is the reason. Computers might reach that kind of processing power one day, but humans do not biologically possess the cognitive capacity to grasp conjunctions of undecillions times undecillions strings, in order to simulate an atom, let alone all the strings we would need to simulate the checkmate situation. The checkmate can only be simulated through languages that use relevant conceptual schemes, which are simplified *sketches* of the actual view. Imagine that a human being, who knows the microphysical language and can make true propositions in it, takes a look at the immensely many pages of coding in microphysical language that is being processed inside the quantum computer, which composes the simulation. There will be so much information, so many pages of coding, that she can read information regarding perhaps one molecule per day. Even if she finishes reading about a small portion of the reality (like the nail of a soldier), she is likely to forget the parts she read in the beginning. She will never fully grasp the D-Day, unless the code in the microphysical language is simplified and encrypted through conceptual schemes. Human beings are biologically limited in their ability to make use of the microphysical language. Once the computer does that in her stead though, she is able to experience the simulation and grasp what happened in D-Day clearly.

This is my complex metaphor of the complex situation. The ultimate reality is so immensely complicated, that it is graspable to humans only through schematic simplification, due to biological limitations. However, it is conceivable that we construct

a device with such processing power, which can use the absolute language in order to process and communicate information regarding meaningful portions of reality. Furthermore, two computers can communicate between them, and perhaps in different microphysical languages too. By that, I mean there might be several microphysical languages symbolizing the objects and properties of microphysics with different symbols. For example, an alien supercomputer might use different symbols than the human supercomputer to represent a string in this language. But these languages, as I have defended before, should be completely intertranslatable and commensurable in the Quinean sense, since they deal with the ultimate microphysical layer of reality where there is no room for schematic disagreement.

As an interesting last note, I believe, if the Matrix-device is theoretically possible, and if this computer can transmit relevant information to human beings in terms of sensation and sensory data, then it will not even need a scheme to make us grasp the D-Day. If a human programs such computer to represent a particular checkmate situation solely through its microphysical facts and sends this representation to another human, the other human will be able to grasp the checkmate situation or the D-Day solely through their shared conceptual scheme. Afterall, the sensory input provided by the mind-independent reality, which is simulated by the computer, does not come with pre-inclusive schemes. We schematize it later in our minds. An alien however, will still not understand the picture, unless it is provided the scheme, since it will not know the game of chess or meaning of checkmate without the scheme. It will experience the same reality, as if it was a part of the D-Day, but the D-Day may not make much sense of it, since it does not share the scheme of humans. The two human

beings' ability to communicate the same information via the same device disappears when it comes to a human communicating the same information to an alien. This leads me to think that the one-way necessitation is only between absolute facts of the world and relative facts in the mind. It is between the microphysics of the checkmate situation, and the logical entailment of those microphysics and the conceptual scheme of the cognizer human. Once the cognizer changes, hence the scheme changes, the necessitation and the truthmaking disappears.

But what about the relationship of necessitation between the mereological part and the whole which many philosophers like Armstrong analyze? Armstrong seems to take the relationship between the strings and the tree as such kind. I already argued that the tree does not exist independently of minds. Furthermore it seems to me that the notion of the mind-independent existence of any *whole* is simply an illusion emerging from conceptual and factual relativity. When I say that there is a one-way necessitation between the strings of a tree and the referent of the tree, I meant a necessitation between the strings in reality and a representation in mind. But saying there is a mereological, *de re* necessitation, between the strings as parts and the tree as a whole, feels like equivalent to saying there is a necessitation between A, B and C and $A \wedge B \wedge C$, which seems meaningless. It seems to me that, ontologically speaking, strings and their properties that compose the tree, are one and the same thing with the tree as a whole, such that there may even not occur a necessitation in-between. We just have to call that constellation of strings a tree. It doesn't mean the tree and the strings are different entities which can have relations among themselves.

CONCLUSION

I would like to quickly revisit previous major cases in the light of the theories I proposed in this thesis. Putnam's case of Carnap and the Polish Logician can be evaluated with my theory in such a way that the schematic difference emerges from the diverging extensions of the concept of the "object" between them. Both of their propositions may be true relative to their own schemes, because they correspond to different relative facts. These relative facts are entailments of the same absolute facts reality with their respective different schemes. Hence, the same entities (marbles in the bag, or their strings) that comprise the shared reality between them, paired with different schemes, entail two different facts, enabling both propositions to be true. And contrary to metaphysical pluralists propose, one can trust this truth is not subject to change in time.

In Sosa's case, there are countless snowdiscball-like entities, and some of these do not share some relative, non-microphysical properties (e.g. the ability to survive partial flattening) with others. The freedom to frame this *already explosive* reality of the snowball and carve a piece that can be called an object belongs to the respective scheme that is being used.

In Baç's case, microphysical facts transmitted by the human scientist to the alien scientist are able to cover the emotional, cultural, or any other aspect that can come to mind related to the situation. However, without the ability to frame and carve the microphysical absolute reality, which *responds to* the fact that *the black king's check-mating the white* together with respect to a scheme, this relative fact may not be transmitted to the alien scientist. This insufficiency in communication, I believe, is

equivalent to the situation where we physically take the alien to the checkmate scene, just for it to not to be able to make sense of the scene, without knowing about human games, traditions, culture and the worldview in general.

I admit that I might have bitten off more than I can chew, trying to fit a theory that offers a new perspective on each of the doctrines of conceptual relativity, factual relativity, factual supervenience, schematic commensurability and realistic truthmaking, within a hundred pages. I should note that I take this thesis as an introductory first-step to a new holistic understanding regarding all of the issues it touches. A full-blooded analysis could have only been made in a Ph.D. dissertation or it would perhaps take several books. Any attempted account of a systematic metaphysics has somehow to deal with plenty of issues like laws of nature, universals and particulars, possibility, actuality and necessity, limits, numbers, classes, time, or mind. The metaphysical understanding of facts and truthmaking in this thesis needs to be tested within many contexts to be considered seriously. Accordingly, here is a variety of immediate questions that comes to my mind:

- Let's say, as presumed in this thesis, there is a mereological chain between the objects of a quark and an atom. Let's say a chain also exists between the properties of quarks and properties of atoms. Do such chains also exist between laws of nature that are manifesting themselves in different layers of reality? For example, gravitation as a law of nature, seems to be a case between particles with mass. We know that there are particles without a mass, and they are made of strings, thus microphysical strings might not have mass. Is there a law of nature

in the microphysical layer of reality, which in turn necessitates gravitation in the higher layers?

- What could be the repercussions of the microphysical fact absolutism in the field of properties, especially regarding nominalism, which is the doctrine that rejects the idea that properties are located in the mind-independent world. Nominalists ground their accounts on the fact that we seem to be unable to find objective criteria that unites every object which shares the same property. My position commits to a realist understanding of properties where there are real entities in the microphysical world which are able to make all the white things white. Can it offer answers to the nominalist approaches or find a middle ground between realism and nominalism?
- Even if there is a minimum length which enables us specify the position-data of strings in space, is there a minimum length of time? Can the microphysical language speak only in the present tense? When I say the string x is at coordinate Y at time T, can the variable T here be an absolute variable like the variable x (an indivisible string) and variable Y (an absolute position) can be? If time is structurally more similar to mathematical numbers than objects or space, then it might be infinitely smaller, meaning that in the absolute language one can only make true propositions in the present tense.

Furthermore, there are also lingual claims that need to be tested in related fields, such as the literature concerning the structure of belief systems.

- Our concepts have fluid borders but the *mensuration* of a relative concept in the absolute scheme will require precise boundaries. For example, we do not really

know after which absolute portion of one planck length interval of the visible color spectrum we should switch from calling it red to orange. How then, the relative scheme comes to be mensurable in the absolute scheme?

- In relation to the precise-practical dichotomy between languages and schemes of lower and higher layers of reality, can we say that the job of philosophers is to discover more precise concepts which takes smaller differences into account?

If the theories presented here should be taken in a more serious manner, the major part of the work remains to be done.

REFERENCES

Armstrong, D. (1997). *A world of states of affairs*. Cambridge: Cambridge University Press.

Armstrong, D. (2010). *Sketch for a systematic metaphysics*. Oxford: Clarendon Press.

Armstrong, D. (2004). *Truth and truthmakers*. Cambridge: Cambridge University Press.

Baç, M. (2003). The ontological status of truthmakers: an alternative to tractarianism and metaphysical anti-realism. *Metaphysica,* 4.1, 5-28.

Baç, M. (2006). Pluralistic Kantianism. *The Philosophical Forum,* 37, 183-204.

Burgess, C & Quevedo, F (2007). The great cosmic roller-coaster ride". Scientific American.

Davidson, D. (1974). On the very idea of a conceptual scheme. *Proceedings and Addressings of the American Philosophical Association, 47*, 5-20.

Heller, M. (1988). Putnam, reference, and realism. In P. French, T. Uehling, & H. Wettstein, (Eds.), *Midwest Studies In Philosophy, XII*, 113-127.

Lynch, M. (1998). *Truth in context: an essay on pluralism and objectivity*. Cambridge, MA: MIT Press.

Lynch, M. (2002). Pluralism, metaphysical realism, and ultimate reality. In W. Alston (Ed.), *Realism and Antirealism* (pp. 57-79). Ithaca, NY: Cornell University Press.

Moser, P. (1999). *Philosophy after objectivity: Making sense in perspective*. Oxford: Oxford University Press.

National Institute of Standards and Technology. (2015*). The NIST Reference on Constants, Units, and Uncertainty*, Retrieved May 31, 2015, from http://physics.nist.gov/cgi-bin/cuu/Value?plkl

Putnam, H. (1987). *The many faces of realism*. La Salle, IL Open Court.

Putnam, H. (1988). *Representation and reality*. Cambridge, MA: MIT Press.

Saussure, F (1983). *Course in general linguistics*. Chicago: Open Court

Sosa, E. (1998). Addendum to nonabsolute existence and conceptual relativity. In P. Inwagen (Ed.), *Metaphysics: The Big Questions*. Malden, MA: Blackwell.

Sosa, E. (2003). Ontological and conceptual relativity and the self. In M. Loux & D. Zimmermann (Eds.), *The Oxford Handbook of Metaphysics*. Oxford: Oxford University Press.

Sosa, E. (1993). Putnam's Pragmatic Realism. *Journal of Philosophy*, 90, 605-626.

McDowell, J. (1994). *Mind and world.* Cambridge: Harvard University Press.