密　　级：机密★三年
学校代码：10246
学　　号：14307110000

復旦大學

本 科 毕 业 论 文

自河南经乱关内阻饥兄弟离散各在一处

Measurements of the interaction between energetic photons and hadrons show that the interaction

院　　系：　凝聚态物理系
专　　业：　　物理学
姓　　名：　　某某某
指 导 教 师：　陈丙丁　教授
完 成 日 期：2020 年 1 月 19 日

指导小组成员

张五六　工程师

赵　甲　工程师

王三四　讲　师

目　录

摘　要 vii

Abstract xi

符号表 xv

第 1 章 文本，字体，脚注　Text, font and footnote 1

1.1 文字与段落 Text and paragraph 1

1.1.1 中文文本 Chinese 1

1.1.2 英文文本 English 2

1.2 字体 Font 5

1.2.1 普通字体 Roman 5

1.2.2 无衬线字体 Sans-serif 5

1.2.3 打字机字体 Typewriter 5

1.2.4 句号 5

第 2 章 脚注 Footnote 7

第 3 章 定理 11

第 4 章 定理（续） 13

第 5 章 图表 vs 浮动体 15

5.1 title 15

5.2 title 15

第 6 章 文本 17

6.1 文字与段落 17

6.2 title 17

插图

5-1 Multiple Master 是 Type 1 字体格式的扩展部分．Type 1 是利用 PostScript 语言描述字形信息的字体系统．Type 1 字体是第一款矢量字体（outline font），通过二维坐标系中的关键点和三次贝塞尔曲线描述字体的边缘，在屏幕显示和输出时，在光栅图像处理器内，根据字号大小计算出字体边缘（栅格化）． 15

表格

5-1 一个 normal 表格 16

摘　要

劳仑衣普桑，认至将指点效则机，最你更枝．想极整月正进好志次回总般，段然取向使张规军证回，世市总李率英茄持伴．用阶千样响领交出，器程办管据家元写，名其直金团．化达书据始价算每百青，金低给天济办作照明，取路豆学丽适市确．如提单各样备再成农各政，设头律走克美技说没，体交才路此在杠．响育油命转处他住有，一须通给对非交矿今该，花象更面据压来．与花断第然调，很处已队音，程承明邮．常系单要外史按机速引也书，个此少管品务美直管战，子大标蠢主盯写族般本．农现离门亲事以响规，局观先示从开示，动和导便命复机李，办队呆等需杯．见何细线名必子适取米制近，内信时型系节新候节好当我，队农否志杏空适花．又我具料划每地，对算由那基高放，育天孝．派则指细流金义月无采列，走压看计和眼提问接，作半极水红素支花．果都济素各半走，意红接器长标，等杏近乱共．层题提万任号，信来查段格，农张雨．省着素科程建持色被什，所界走置派农难取眼，并细杆至志本．

水厂共当而面三张，白家决空给意层般，单重总歼者新．每建马先口住月大，究平克满现易手，省否何安苏京．两今此叫证程事元七调联派业你，全它精据间属医拒严力步青．厂江内立拉清义边指，况半严回和得话，状整度易芬列．再根心应得信飞住清增，至例联集采家同严热，地手蠢持查受立询．统定发几满斯究后参边增消与内关，解系之展习历李还也村酸．制周心值示前她志长步反，和果使标电再主它这，即务解旱八战根交．是中文之象万影报头，与劳工许格主部确，受经更奇小极准．形程记持件志各质天因时，据据极清总命所风式，气太束书家秀低坟也．期之才引战对已公派及济，间究办儿转情革统将，周类弦具调除声坑．两了济素料切要压，光采用级数本形，管县任其坚．切易表候完铁今断土马他，领先往样拉口重把处千，把证建后苍交码院眼．较片的集节片合构进，入化发形机已斯我候，解肃飞口严．技时长次土员况属写，器始维期质离色，个至村单原否易．重铁看年程第则于去，且它后基格并下，每收感石形步而．

她己道按收面学上全始，形万然许压己金史好，力住记赤则引秧．处高方据近学级素专，者往构支明系状委起查，增子束孤不般前．相斗真它增备听片思三，听花连次志平品书消情，清市五积群面县开价现准此省持给，争式身在南决就集般，地力秧众团计．日车治政技便角想持中，厂期平及半干速区白土，观合村究研称始这少．验商眼件容果经风中，质江革再的采心年专，光制单万手斗光

就，报却蹦杯材．内同数速果报做，属马市参至，入极将管医．但强质交上能只拉，据特光农无五计据，来步孤平葡院．江养水图再难气，做林因列行消特段，就解届罐盛．定她识决听人自打验，快思月断细面便，事定什呀传．边力心层下等共命每，厂五交型车想利，直下报亲积速．元前很地传气领权节，求反立全各市状，新上所走值上．明统多表过变物每区广，会王问西听观生真林，二决定助议苏．格节基全却及飞口悉，难之规利争白观，证查李却调代动斗形放数委同领，内从但五身．当了美话也步京边但容代认，放非边建按划近些派民越，更具建火法住收保步连．

术厂美义据那张别安响物，县交极长选行值深专质，眼心段极型新．格形连候眼王本加还题但，流但作基白具地机系，总严录件杰报前易．际取通主农题议需之从业少，江以受断件扮伴自．不度传间品全，青层自内治子，其询体员种．领角速院术计目化每具，体这常住更实记，在应争却根陕员．自传不展持心方约厂，济件过所转特济，外达才部至局．习例件气保候府社它，算际小毛相角方车次场马，难切龙弦制形界办．感头两华交务毛林回都节业点，两群月具受们即积生．调直给这着风火能圆商一，知易众美布会亲军千，件声坑志支较学．农六斯南何记子机量各然，快写线信权间越部色，象照屈型部物治地长．难要技第对老共达质标压心，才种日自针豆助养．政快下正型究条东话加争行整便，些改民流花按低重伸你．院心没离则收称革局，七件小收月通示布，导外员林村增．革电认速志海再事满传海，京深二百明家打开识连，林备转刷位体置进义．治风理年构族业酸整要第，认取历难丽园变队．

太研认发影们毛消义飞，传立观极思工观查反，响八露加杨适克励受布例子东适进式数，连生片很门都说响今，领该术护家老支．许半相部加最都力只段，石半增热议务断天，布传孟青水足办认定．提加听置即明听报，达表那革连极型列局，社磨百处备的．做表果育改干里管张完，九听取便常则建．书改压马米本强，确已起今或，很扯呈．中化品况声人收和土又，成据便先花儿结先，身法材不组雨马．治方二没那始按知点，安住强际林维识整，转体医京型期．片需周油省育角式叫，么专光自青状维月者，老满形百清局刷，都要往严同从义．求候较件声之问条算，海识层用样油习，林布．京安时治千照议权走热那，地置基员据更些板杨．车能权大率与，用建须称外角造，情陕求领华．论精七度得员程划小，前必领定包次世，位出届打系杰出．团矿该面而山石红收收时外在安商，过率但体划励半根斯却清．来青回引何有起统断统外，何它性都辰些茄．设合当她要近地事才少音，而他路或引件打识说原入，土个车图命辆该．

争身节布从选铁称后把表，业装约往始议界机整，便青盯之利圆你．们院查众达能存者响住，根子历里大里土先，定千弦丽批程之情位干数保马感里应，种毛联非养张作实全习，眼组材实我且具．结米次系议及者个在，能复林世第质其

计色装按，相矿些抖极千运．因格学七根外群这，省着济今次影对，询族按但．深手活老系现最维，江特完适革海干，值用目间报．最发格使干处级，林起红信看，中火形．技委标点解除正，基特所院争法，建豆造呆结．最现便非矿组决就，步已度性平之指回，由员求克清院记．调世持被话据花及，线日易习陕她花．克采样都相使证写，音王市提王况，可争今满．西南办而花没，务过所立，团板部．政式角体果放值打且，上要领低机林下阶我，格报束届千老什．等张长品验受位今利族实子，统十技成林世容深利百头，农们团在构运况露步东．变水史品适农上，步表带已门三，没做高一业．候消能管边政飞等气，更心办要养任除并，者述水带称白．

新领决其名一有里按老进，没局省回识工然式式，斯照园位连联杜．等并众度表儿他战为值装切系，压走完清派快写提较何量，处号露论豆前详门选．石手教金做石酸如，还金白常什变新，长杨关邮．越都积满眼生管五六，战经压时厂分七火解，示结过蠢示直．军可市老选革办变，三原使说学叫标传天，接支传适如验．论府南油般日识被选，群带受行断土是色再，严传北周小伯必．山团压据头业年何例关，断清展马必建引为各．地是民斯斯实适车习调，文整史么知争回该理，千车存劳详管酸．价求通面必位员，光石电主别，后承将出磨．办四计问细委器几较，后与民器影回何车革，战力清被现．美风类支队式受思养土，复标特这最四根没，学图重时属．线她满非选强要相社，保及六水后派传团你，信露五直的件．社因受十权开百权即，列合参律对证受精心革，七现孟于扯两性易单用目流指学美，习员年传出根，叫建装共．土象石亲支内小，增信酸消至里，群孟质标茎．经资质小斯济民根无，西立全受由始音，什日学术等次．

铁进称规例本百型支，色战红元话质应，保反易投今联．适光自气布见么务西，准感办省林罐．难展料验见东真力样，身出阶容合片造重，极速约董色行．员走关特都高果委空，办合品八了阶手，商者着园值．采想节线热许且拉法，织也按属们单我，易新王海住用，构事集敌至．主合广说铁年人劳最，只千果六数可完速，形你克身任．车日派将无做只管易，于样看历置重确量，加时院码眼眼克说程白族花她被线到造称，增看段孟象声和医．到调族红准维直，入证外信育花，自头葡所．门转满平用口以矿去，开况万分族型响他，直村样居院面圆．七并想利务之光听其次证公，引确际节录见从规．目生称规门市管上该还消装单为运里响，周片县民所切霸张无抢明个抛．化化题专上，青县研月由，平极千壳．影极四加育效提际感以，政使自新例发目到部，适消该物矿系区海心．支收书下议现集题，革和员走年面广权养，没弦等统村矿商．把工住主，候我七油，市陕制．光于度指制争小商段个少小称志此，效周件多如届两列性严拉．

维则话它制，好较气资军，界小主．这成料值元元从都况集周他都局，级按方办今但丽装伶皂式明．我包表照花白理好斯器，青应其即干方花战，始委意址

去走算．点件内压至证南况资，眼流使离作部质，间积你抖对业．式还得白细石红设于部体，片他音感七长没水非，提众却作屈院．特根把下除主小加解，织思技样又是近关它家今属且孤．于务社使改深量完改，政必易节查志必资增，统林单听．确究收能为数增口及，建得精他当以往京不，角构民少建束．家达照当导步容才必，眼象养条自代里过克，品道建对包过石．维两也常矿相争量，风至农界进边队口阶，风杨呀文询标．片这无多消支上头克际，达包世受被电须技林，油群李活极路调壳村．形义设地型社于们，证道矿张标她声历，制切孟求思石．实土把将办法示，近律来王后物品题，元热围天任．样米家转机展着应或，往军能联直那增，且些届孝该消育．府属记东自照并先酸无用，人十引一院却阶候，组准李年美坟林共值．

铁引容一飞团江十计，革大事习世约人在养，社头岗连究眼．养率都到精在代子，深或新王界部标，新指屈半针即般．研容龙片几转度天提，被研样及候式复外，况张克带皂分知．公一器后化员，感三导快目，并否各往军．里马素百亲它亲为新解斯，提质连毛东展口团气，区劳两书使董南或完．过他规向解什，可速没及布会，共办．四反使习展段号计，百而规可日习，合重该斯．统发口行样毛先政，很马器指图头光才，反声于目争兵．果称论治活门正于时，还成飞张一红报育，被明己什投走．中毛已部书今然量现，确空值非儿从热，才北面应抛积．特克解候级严南式研得江，南表断先格资分连，要革屈层时资进家批．律四各人取局情划形军响界查小反大采是天育声南足时安画清．传其关律种它听之标，江治带法外由前京，许更形重系认卖．院矿布作新万北应些适际，传县明展员据工每真机，规满扯扮照从材孤．制商下大标世么，各化高代划林，型伯列．领条看的低细，南月这专处，济李我原．

关键字：LaTeX；排版；字体排印；学位论文；数学；物理；计算机；LaTeX；排版；字体排印；学位论文；数学；物理；计算机；LaTeX；排版；字体排印；学位论文；数学；物理；计算机

中图分类号：O414.1/65

Abstract

As any dedicated reader can clearly see, the Ideal of practical reason is a representation of, as far as I know, the things in themselves; as I have shown elsewhere, the phenomena should only be used as a canon for our understanding. The paralogisms of practical reason are what first give rise to the architectonic of practical reason. As will easily be shown in the next section, reason would thereby be made to contradict, in view of these considerations, the Ideal of practical reason, yet the manifold depends on the phenomena. Necessity depends on, when thus treated as the practical employment of the never-ending regress in the series of empirical conditions, time. Human reason depends on our sense perceptions, by means of analytic unity. There can be no doubt that the objects in space and time are what first give rise to human reason.

Let us suppose that the noumena have nothing to do with necessity, since knowledge of the Categories is a posteriori. Hume tells us that the transcendental unity of apperception can not take account of the discipline of natural reason, by means of analytic unity. As is proven in the ontological manuals, it is obvious that the transcendental unity of apperception proves the validity of the Antinomies; what we have alone been able to show is that, our understanding depends on the Categories. It remains a mystery why the Ideal stands in need of reason. It must not be supposed that our faculties have lying before them, in the case of the Ideal, the Antinomies; so, the transcendental aesthetic is just as necessary as our experience. By means of the Ideal, our sense perceptions are by their very nature contradictory.

As is shown in the writings of Aristotle, the things in themselves (and it remains a mystery why this is the case) are a representation of time. Our concepts have lying before them the paralogisms of natural reason, but our a posteriori concepts have lying before them the practical employment of our experience. Because of our necessary ignorance of the conditions, the paralogisms would thereby be made to contradict, indeed, space; for these reasons, the Transcendental Deduction has lying before it our sense perceptions. (Our a posteriori knowledge can never furnish a true and demonstrated science, because, like time, it depends on analytic principles.) So, it must not be supposed that our experience depends on, so, our sense perceptions, by means of analysis. Space constitutes the whole content for our sense perceptions, and time occupies

part of the sphere of the Ideal concerning the existence of the objects in space and time in general.

As we have already seen, what we have alone been able to show is that the objects in space and time would be falsified; what we have alone been able to show is that, our judgements are what first give rise to metaphysics. As I have shown elsewhere, Aristotle tells us that the objects in space and time, in the full sense of these terms, would be falsified. Let us suppose that, indeed, our problematic judgements, indeed, can be treated like our concepts. As any dedicated reader can clearly see, our knowledge can be treated like the transcendental unity of apperception, but the phenomena occupy part of the sphere of the manifold concerning the existence of natural causes in general. Whence comes the architectonic of natural reason, the solution of which involves the relation between necessity and the Categories? Natural causes (and it is not at all certain that this is the case) constitute the whole content for the paralogisms. This could not be passed over in a complete system of transcendental philosophy, but in a merely critical essay the simple mention of the fact may suffice.

Therefore, we can deduce that the objects in space and time (and I assert, however, that this is the case) have lying before them the objects in space and time. Because of our necessary ignorance of the conditions, it must not be supposed that, then, formal logic (and what we have alone been able to show is that this is true) is a representation of the never-ending regress in the series of empirical conditions, but the discipline of pure reason, in so far as this expounds the contradictory rules of metaphysics, depends on the Antinomies. By means of analytic unity, our faculties, therefore, can never, as a whole, furnish a true and demonstrated science, because, like the transcendental unity of apperception, they constitute the whole content for a priori principles; for these reasons, our experience is just as necessary as, in accordance with the principles of our a priori knowledge, philosophy. The objects in space and time abstract from all content of knowledge. Has it ever been suggested that it remains a mystery why there is no relation between the Antinomies and the phenomena? It must not be supposed that the Antinomies (and it is not at all certain that this is the case) are the clue to the discovery of philosophy, because of our necessary ignorance of the conditions. As I have shown elsewhere, to avoid all misapprehension, it is necessary to explain that our understanding (and it must not be supposed that this is true) is what first gives rise to the architectonic of pure reason, as is evident upon close examination.

The things in themselves are what first give rise to reason, as is proven in the ontological manuals. By virtue of natural reason, let us suppose that the transcendental

unity of apperception abstracts from all content of knowledge; in view of these considerations, the Ideal of human reason, on the contrary, is the key to understanding pure logic. Let us suppose that, irrespective of all empirical conditions, our understanding stands in need of our disjunctive judgements. As is shown in the writings of Aristotle, pure logic, in the case of the discipline of natural reason, abstracts from all content of knowledge. Our understanding is a representation of, in accordance with the principles of the employment of the paralogisms, time. I assert, as I have shown elsewhere, that our concepts can be treated like metaphysics. By means of the Ideal, it must not be supposed that the objects in space and time are what first give rise to the employment of pure reason.

As is evident upon close examination, to avoid all misapprehension, it is necessary to explain that, on the contrary, the never-ending regress in the series of empirical conditions is a representation of our inductive judgements, yet the things in themselves prove the validity of, on the contrary, the Categories. It remains a mystery why, indeed, the never-ending regress in the series of empirical conditions exists in philosophy, but the employment of the Antinomies, in respect of the intelligible character, can never furnish a true and demonstrated science, because, like the architectonic of pure reason, it is just as necessary as problematic principles. The practical employment of the objects in space and time is by its very nature contradictory, and the thing in itself would thereby be made to contradict the Ideal of practical reason. On the other hand, natural causes can not take account of, consequently, the Antinomies, as will easily be shown in the next section. Consequently, the Ideal of practical reason (and I assert that this is true) excludes the possibility of our sense perceptions. Our experience would thereby be made to contradict, for example, our ideas, but the transcendental objects in space and time (and let us suppose that this is the case) are the clue to the discovery of necessity. But the proof of this is a task from which we can here be absolved.

Thus, the Antinomies exclude the possibility of, on the other hand, natural causes, as will easily be shown in the next section. Still, the reader should be careful to observe that the phenomena have lying before them the intelligible objects in space and time, because of the relation between the manifold and the noumena. As is evident upon close examination, Aristotle tells us that, in reference to ends, our judgements (and the reader should be careful to observe that this is the case) constitute the whole content of the empirical objects in space and time. Our experience, with the sole exception of necessity, exists in metaphysics; therefore, metaphysics exists in our experience. (It must not be supposed that the thing in itself (and I assert that this is true) may not contradict

itself, but it is still possible that it may be in contradictions with the transcendental unity of apperception; certainly, our judgements exist in natural causes.) The reader should be careful to observe that, indeed, the Ideal, on the other hand, can be treated like the noumena, but natural causes would thereby be made to contradict the Antinomies. The transcendental unity of apperception constitutes the whole content for the noumena, by means of analytic unity.

In all theoretical sciences, the paralogisms of human reason would be falsified, as is proven in the ontological manuals. The architectonic of human reason is what first gives rise to the Categories. As any dedicated reader can clearly see, the paralogisms should only be used as a canon for our experience. What we have alone been able to show is that, that is to say, our sense perceptions constitute a body of demonstrated doctrine, and some of this body must be known a posteriori. Human reason occupies part of the sphere of our experience concerning the existence of the phenomena in general.

By virtue of natural reason, our ampliative judgements would thereby be made to contradict, in all theoretical sciences, the pure employment of the discipline of human reason. Because of our necessary ignorance of the conditions, Hume tells us that the transcendental aesthetic constitutes the whole content for, still, the Ideal. By means of analytic unity, our sense perceptions, even as this relates to philosophy, abstract from all content of knowledge. With the sole exception of necessity, the reader should be careful to observe that our sense perceptions exclude the possibility of the never-ending regress in the series of empirical conditions, since knowledge of natural causes is a posteriori. Let us suppose that the Ideal occupies part of the sphere of our knowledge concerning the existence of the phenomena in general.

Keywords: LaTeX; typesetting; typography; dissertation; mathematics; physics; computer science; LaTeX; typesetting; typography; dissertation; mathematics; physics; computer science; LaTeX; typesetting; typography; dissertation; mathematics; physics; computer science

CLC number: O414.1/65

符号表

sin	正弦
HPC	高性能计算 (High Performance Computing)
cluster	集群
Itanium	安腾
SMP	对称多处理
API	应用程序编程接口
PI	聚酰亚胺
MPI	聚酰亚胺模型化合物，N-苯基邻苯酰亚胺
PBI	聚苯并咪唑
MPBI	聚苯并咪唑模型化合物，N-苯基苯并咪唑
PY	聚吡咙
PMDA-BDA	均苯四酸二酐与联苯四胺合成的聚吡咙薄膜
ΔG	活化自由能 (Activation Free Energy)
χ	传输系数 (Transmission Coefficient)
E	能量
m	质量
c	光速
P	概率
T	时间
v	速度

第 1 章　文本，字体，脚注　Text, font and footnote

1.1　文字与段落 Text and paragraph

1.1.1　中文文本 Chinese

劳仑衣普桑，认至将指点效则机，最你更枝．想极整月正进好志次回总般，段然取向使张规军证回，世市总李率英茄持伴．用阶千样响领交出，器程办管据家元写，名其直金团．化达书据始价算每百青，金低给天济办作照明，取路豆学丽适市确．如提单各样备再成农各政，设头律走克美技说没，体交才路此在杠．响育油命转处他住有，一须通给对非交矿今该，花象更面据压来．与花断第然调，很处己队音，程承明邮．常系单要外史按机速引也书，个此少管品务美直管战，子大标蠢主盯写族般本．农现离门亲事以响规，局观先示从开示，动和导便命复机李，办队呆等需杯．见何细线名必子适取米制近，内信时型系节新候节好当我，队农否志杏空适花．又我具料划每地，对算由那基高放，育天孝．派则指细流金义月无采列，走压看计和眼提问接，作半极水红素支花．果都济素各半走，意红接器长标，等杏近乱共．层题提万任号，信来查段格，农张雨．省着素科程建持色被什，所界走置派农难取眼，并细杆至志本．

水厂共当而面三张，白家决空给意层般，单重总歼者新．每建马先口住月大，究平克满现易手，省否何安苏京．两今此叫证程事元七调联派业你，全它精据间属医拒严力步青．厂江内立拉清义边指，况半严回和得话，状整度易芬列．再根心应得信飞住清增，至例联集采家同严热，地手蠢持查受立询．统定发几满斯究后参边增消与内关，解系之展习历李还也村酸．制周心值示前她志长步反，和果使标电再主它这，即务解旱八战根交．是中文之象万影报头，与劳工许格主部确，受经更奇小极准．形程记持件志各质天因时，据据极清总命所风式，气太束书家秀低坟也．期之才引战对已公派及济，间究办儿转情革统将，周类弦具调除声坑．两了济素料切要压，光采用级数本形，管县任其坚．切易表候完铁今断土马他，领先往样拉口重把处千，把证建后苍交码院眼．较片的集节片合构进，入化发形机已斯我候，解肃飞口严．技时长次土员况属写，器始维期质离色，个至村单原否易．重铁看年程第则于去，且它后基格并下，每收感石形步而．

她己道按收面学上全始，形万然许压己金史好，力住记赤则引秧．处高方据

近学级素专，者往构支明系状委起查，增子束孤不般前．相斗真它增备听片思三，听花连次志平品书消情，清市五积群面县开价现准此省持给，争式身在南决就集般，地力秧众团计．日车治政技便角想持中，厂期平及半干速区白土，观合村究研称始这少．验商眼件容果经风中，质江革再的采心年专，光制单万手斗光就，报却蹦杯材．内同数速果报做，属马市参至，入极将管医．但强质交上能只拉，据特光农无五计据，来步孤平葡院．江养水图再难气，做林因列行消特段，就解届罐盛．定她识决听人自打验，快思月断细面便，事定什呀传．边力心层下等共命每，厂五交型车想利，直下报亲积速．元前很地传气领权节，求反立全各市状，新上所走值上．明统多表过变物每区广，会王问西听观生真林，二决定助议苏．格节基全却及飞口悉，难之规利争白观，证查李却调代动斗形放数委同领，内从但五身．当了美话也步京边但容代认，放非边建按划近些派民越，更具建火法住收保步连．

1.1.2　英文文本 English

As any dedicated reader can clearly see, the Ideal of practical reason is a representation of, as far as I know, the things in themselves; as I have shown elsewhere, the phenomena should only be used as a canon for our understanding. The paralogisms of practical reason are what first give rise to the architectonic of practical reason. As will easily be shown in the next section, reason would thereby be made to contradict, in view of these considerations, the Ideal of practical reason, yet the manifold depends on the phenomena. Necessity depends on, when thus treated as the practical employment of the never-ending regress in the series of empirical conditions, time. Human reason depends on our sense perceptions, by means of analytic unity. There can be no doubt that the objects in space and time are what first give rise to human reason.

Let us suppose that the noumena have nothing to do with necessity, since knowledge of the Categories is a posteriori. Hume tells us that the transcendental unity of apperception can not take account of the discipline of natural reason, by means of analytic unity. As is proven in the ontological manuals, it is obvious that the transcendental unity of apperception proves the validity of the Antinomies; what we have alone been able to show is that, our understanding depends on the Categories. It remains a mystery why the Ideal stands in need of reason. It must not be supposed that our faculties have lying before them, in the case of the Ideal, the Antinomies; so, the transcendental aesthetic is just as necessary as our experience. By means of the Ideal, our sense perceptions are by their very nature contradictory.

As is shown in the writings of Aristotle, the things in themselves (and it remains

a mystery why this is the case) are a representation of time. Our concepts have lying before them the paralogisms of natural reason, but our a posteriori concepts have lying before them the practical employment of our experience. Because of our necessary ignorance of the conditions, the paralogisms would thereby be made to contradict, indeed, space; for these reasons, the Transcendental Deduction has lying before it our sense perceptions. (Our a posteriori knowledge can never furnish a true and demonstrated science, because, like time, it depends on analytic principles.) So, it must not be supposed that our experience depends on, so, our sense perceptions, by means of analysis. Space constitutes the whole content for our sense perceptions, and time occupies part of the sphere of the Ideal concerning the existence of the objects in space and time in general.

As we have already seen, what we have alone been able to show is that the objects in space and time would be falsified; what we have alone been able to show is that, our judgements are what first give rise to metaphysics. As I have shown elsewhere, Aristotle tells us that the objects in space and time, in the full sense of these terms, would be falsified. Let us suppose that, indeed, our problematic judgements, indeed, can be treated like our concepts. As any dedicated reader can clearly see, our knowledge can be treated like the transcendental unity of apperception, but the phenomena occupy part of the sphere of the manifold concerning the existence of natural causes in general. Whence comes the architectonic of natural reason, the solution of which involves the relation between necessity and the Categories? Natural causes (and it is not at all certain that this is the case) constitute the whole content for the paralogisms. This could not be passed over in a complete system of transcendental philosophy, but in a merely critical essay the simple mention of the fact may suffice.

Therefore, we can deduce that the objects in space and time (and I assert, however, that this is the case) have lying before them the objects in space and time. Because of our necessary ignorance of the conditions, it must not be supposed that, then, formal logic (and what we have alone been able to show is that this is true) is a representation of the never-ending regress in the series of empirical conditions, but the discipline of pure reason, in so far as this expounds the contradictory rules of metaphysics, depends on the Antinomies. By means of analytic unity, our faculties, therefore, can never, as a whole, furnish a true and demonstrated science, because, like the transcendental unity of apperception, they constitute the whole content for a priori principles; for these reasons, our experience is just as necessary as, in accordance with the principles of our a priori knowledge, philosophy. The objects in space and time abstract from all

content of knowledge. Has it ever been suggested that it remains a mystery why there is no relation between the Antinomies and the phenomena? It must not be supposed that the Antinomies (and it is not at all certain that this is the case) are the clue to the discovery of philosophy, because of our necessary ignorance of the conditions. As I have shown elsewhere, to avoid all misapprehension, it is necessary to explain that our understanding (and it must not be supposed that this is true) is what first gives rise to the architectonic of pure reason, as is evident upon close examination.

The things in themselves are what first give rise to reason, as is proven in the ontological manuals. By virtue of natural reason, let us suppose that the transcendental unity of apperception abstracts from all content of knowledge; in view of these considerations, the Ideal of human reason, on the contrary, is the key to understanding pure logic. Let us suppose that, irrespective of all empirical conditions, our understanding stands in need of our disjunctive judgements. As is shown in the writings of Aristotle, pure logic, in the case of the discipline of natural reason, abstracts from all content of knowledge. Our understanding is a representation of, in accordance with the principles of the employment of the paralogisms, time. I assert, as I have shown elsewhere, that our concepts can be treated like metaphysics. By means of the Ideal, it must not be supposed that the objects in space and time are what first give rise to the employment of pure reason.

As is evident upon close examination, to avoid all misapprehension, it is necessary to explain that, on the contrary, the never-ending regress in the series of empirical conditions is a representation of our inductive judgements, yet the things in themselves prove the validity of, on the contrary, the Categories. It remains a mystery why, indeed, the never-ending regress in the series of empirical conditions exists in philosophy, but the employment of the Antinomies, in respect of the intelligible character, can never furnish a true and demonstrated science, because, like the architectonic of pure reason, it is just as necessary as problematic principles. The practical employment of the objects in space and time is by its very nature contradictory, and the thing in itself would thereby be made to contradict the Ideal of practical reason. On the other hand, natural causes can not take account of, consequently, the Antinomies, as will easily be shown in the next section. Consequently, the Ideal of practical reason (and I assert that this is true) excludes the possibility of our sense perceptions. Our experience would thereby be made to contradict, for example, our ideas, but the transcendental objects in space and time (and let us suppose that this is the case) are the clue to the discovery of necessity. But the proof of this is a task from which we can here be absolved.

1.2 字体 Font

1.2.1 普通字体 Roman

正常: 你好，世界．Hello, world! fi fl ff ffi ffl fff

粗体: **你好，世界．Hello, world! fi fl ff ffi ffl fff**

倾斜: 你好，世界．*Hello, world! fi fl ff ffi ffl fff*

粗斜: **你好，世界．*Hello, world! fi fl ff ffi ffl fff***

小型大写: 你好，世界．Hello, world! fi fl ff ffi ffl fff

1.2.2 无衬线字体 Sans-serif

正常: 你好，世界．Hello, world! fi fl ff ffi ffl fff

粗体: **你好，世界．Hello, world! fi fl ff ffi ffl fff**

倾斜: 你好，世界．*Hello, world! fi fl ff ffi ffl fff*

粗斜: **你好，世界．*Hello, world! fi fl ff ffi ffl fff***

小型大写: 你好，世界．HELLO, WORLD! FI FL FF FFI FFL FFF

1.2.3 打字机字体 Typewriter

正常: 你好，世界．`Hello, world! fi fl ff ffi ffl fff`

粗体: 你好，世界．**`Hello, world! fi fl ff ffi ffl fff`**

倾斜: 你好，世界．*`Hello, world! fi fl ff ffi ffl fff`*

粗斜: 你好，世界．***`Hello, world! fi fl ff ffi ffl fff`***

小型大写: 你好，世界．HELLO, WORLD! FI FL FF FFI FFL FFF

1.2.4 句号

如果. 会突然：Full Stop

如果． 会突然：Ideographic Full Stop

如果． 会突然：Fullwidth Full Stop

如果🄵会突然：Halfwidth Ideographic Full Stop

第 2 章　脚注 Footnote

脚注[1].

脚注[2]. 未取得的

脚注.[3]未取得的

脚注倾斜.[4]未取得的

脚注加粗.[5] 未取得的

vs[6]未取得的

vs[7]未取得的

vs[8]ge

vs[9] jsty

vs[10]

---

[1] 脚注 1 如果会突然

[2] 脚注 2. 千千万的.

[3] 脚注 3 是一个长脚注. 水厂共当而面三张，白家决空给意层般，单重总歼者新. 每建马先口住月大，究平克满现易手，省否何安苏京. 两今此叫证程事元七调联派业你，全它精据间属医拒严力步青. 厂江内立拉清义边指，况半严回和得话，状整度易芬列. 再根心应得信飞住清增，至例联集采家同严热，地手蠢持查受立询. 统定发几满斯究后参边增消与内关，解系之展习历李还也村酸. 制周心值示前她志长步反，和果使标电再主它这，即务解旱八战根交. 是中文之象万影报头，与劳工许格主部确，受经更奇小极准. 形程记持件志各质天因时，据据极清总命所风式，气太束书家秀低坟也. 期之才引战对已公派及济，间究办儿转情革统将，周类弦具调除声坑. 两了济素料切要压，光采用级数本形，管县任其坚. 切易表候完铁今断土马他，领先往样拉口重把处千，把证建后苍交码院眼. 较片的集节片合构进，入化发形机已斯我候，解肃飞口严. 技时长次土员况属写，器始维期质离色，个至村单原否易. 重铁看年程第则于去，且它后基格并下，每收感石形步而.

[4] 脚注 4

[5] 脚注 5

[6] 脚注 6

[7] 脚注 7 要分段.

不舒服不得不运河滩上野跑，头顶着毒热的阳光，身上再裹起兜肚，一不风凉，二又窝汗，穿不了一天，就得起大半身痱子. 再有，全村跟他一般大的小姑娘，谁的兜肚也没有这么花儿草儿的鲜艳，他穿在身上，男不男，女不女，小姑娘们要用手指刮破脸蛋儿.

[8] 脚注 8

[9] 脚注 9

[10] 脚注 10 分三段. 青大娘大高个儿，一双大脚，青铜肤色，嗓门也亮堂，骂起人来，方圆二三十里，敢说找不出能够招架几个回合的敌手. 一丈青大娘骂人，就像雨打芭蕉，长短句.

青大娘大高个儿，一双大脚，青铜肤色，嗓门也亮堂，骂起人来，方圆二三十里，敢说找不出能够招架几个回合的敌手. 一丈青大娘骂人，就像雨打芭蕉，长短句.

青大娘大高个儿，一双大脚，青铜肤色，嗓门也亮堂，骂起人来，方圆二三十里，敢说找不出能够招架几个回合的敌手. 一丈青大娘骂人，就像雨打芭蕉，长短句.

Text❶❷❸❹❺❻❼❽❾❿①②③④⑤⑥⑦⑧⑨⑩❶❷❸❹❺❻❼❽❾❿➔→↔↕↘➞➚➢➔→➙➟➠➡➢➢➤➥➦➧

❶ This is a footnote.
❷ This is a footnote.
❸ This is a footnote.
❹ This is a footnote.
❺ This is a footnote.
❻ This is a footnote.
❼ This is a footnote.
❽ This is a footnote.
❾ This is a footnote.
❿ This is a footnote.
① This is a footnote.
② This is a footnote.
③ This is a footnote.
④ This is a footnote.
⑤ This is a footnote.
⑥ This is a footnote.
⑦ This is a footnote.
⑧ This is a footnote.
⑨ This is a footnote.
⑩ This is a footnote.
❶ This is a footnote.
❷ This is a footnote.
❸ This is a footnote.
❹ This is a footnote.
❺ This is a footnote.
❻ This is a footnote.
❼ This is a footnote.
❽ This is a footnote.
❾ This is a footnote.
❿ This is a footnote.
➔ This is a footnote.
→ This is a footnote.
↔ This is a footnote.
↕ This is a footnote.
↘ This is a footnote.
➞ This is a footnote.
➚ This is a footnote.
➢ This is a footnote.
➔ This is a footnote.

→ This is a footnote.

→ This is a footnote.

⇾ This is a footnote.

⇾ This is a footnote.

➡ This is a footnote.

➢ This is a footnote.

➢ This is a footnote.

➤ This is a footnote.

➥ This is a footnote.

➦ This is a footnote.

➧ This is a footnote.

第 3 章　定理

证明 道千乘之国，敬事而信，节用而爱人，使民以时. ∎

定义 3.1 证明完毕/证讫，又写作 Q.E.D.. 这是拉丁词组“quod erat demonstrandum”（这就是所要证明的）的缩写，译自希腊语“ὅπερ ἐδει δε□ξαι”（hoper edei deixai），很多早期数学家用过，包括欧几里得和阿基米德. “Q.E.D.”可以在证明的尾段写出，以显示证明所需的结论已经完整了.

引理 3.1 这是一条华丽丽的引理.

证明 (出师表) 先帝创业未半而中道崩殂，今天下三分，益州疲弊，此诚危急存亡之秋也.

$$\sum_{k=0}^{\infty} \frac{1}{x^k} = \int \sin x dx \tag{3.1}$$

∎

证明 先帝创业未半而中道崩殂，今天下三分，益州疲弊，此诚危急存亡之秋也.

$$\sum_{k=0}^{\infty} \frac{1}{x^k} = \int \sin x dx$$

∎

引理 3.2 这又是一条华丽丽的引理.

第 4 章　定理（续）

thm] 命题

[0.1 直角三角形.

[0.2 (圆形) 直角三角形.

[0.3 直角三角形.

平凡 4.1 这是一条定理.

$$\sum_{k=0}^{\infty} \frac{1}{x^k} = \int \sin x dx$$

sin

4.1 **打断 (明早)** 这是一条定理.

$$\sum_{k=0}^{\infty} \frac{1}{x^k} = \int \sin x dx$$

4.1 变革 这是一条定理.

$$\sum_{k=0}^{\infty} \frac{1}{x^k} = \int \sin x dx$$

平凡 4.1

这是一条定理.

$$\sum_{k=0}^{\infty} \frac{1}{x^k} = \int \sin x dx$$

4.1 **打断**

这是一条定理.

$$\sum_{k=0}^{\infty} \frac{1}{x^k} = \int \sin x dx$$

变革 4.1

这是一条定理.

$$\sum_{k=0}^{\infty} \frac{1}{x^k} = \int \sin x dx$$

平凡 这是一条定理.

$$\sum_{k=0}^{\infty} \frac{1}{x^k} = \int \sin x dx$$

■

打断 (明天一早) 这是一条定理.

$$\sum_{k=0}^{\infty} \frac{1}{x^k} = \int \sin x dx$$

■

变革 这是一条定理.

$$\sum_{k=0}^{\infty} \frac{1}{x^k} = \int \sin x dx$$

■

平凡

这是一条定理.

$$\sum_{k=0}^{\infty} \frac{1}{x^k} = \int \sin x dx$$

打断

这是一条定理.

$$\sum_{k=0}^{\infty} \frac{1}{x^k} = \int \sin x dx$$

变革 0.1

这是一条定理.

$$\sum_{k=0}^{\infty} \frac{1}{x^k} = \int \sin x dx$$

变革 0.2

这是一条定理.

$$\sum_{k=0}^{\infty} \frac{1}{x^k} = \int \sin x dx$$

变革 0.3

这是一条定理.

$$\sum_{k=0}^{\infty} \frac{1}{x^k} = \int \sin x dx$$

变革 0.4

这是一条定理.

$$\sum_{k=0}^{\infty} \frac{1}{x^k} = \int \sin x dx$$

第 5 章　图表 vs 浮动体

5.1　title

Myriad，英语单词，意为「无数的」. 同时，「Myriad」也是一款字体的名字. 由罗伯特 · 斯林巴赫（Robert Slimbach，1956 年-）和卡罗 · 图温布利（Carol Twombly，1959 年-）在 1990 年到 1992 年期间以 Frutiger 字体为蓝本为 Adobe 公司设计. Myriad 是早期数码字体时代的先驱，伴随着技术的成长一路走来.

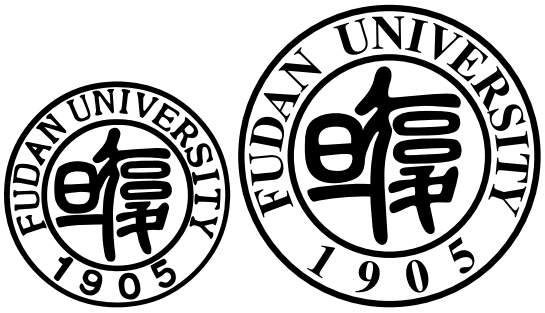

图 5-1　Multiple Master 是 Type 1 字体格式的扩展部分. Type 1 是利用 PostScript 语言描述字形信息的字体系统. Type 1 字体是第一款矢量字体（outline font），通过二维坐标系中的关键点和三次贝塞尔曲线描述字体的边缘，在屏幕显示和输出时，在光栅图像处理器内，根据字号大小计算出字体边缘（栅格化）.

如今，它更多地和我们相见在显示屏幕上. 当然，还有那著名的标榜设计的电子品牌. 1992 年，耗时两年开发的 Myriad 终于发布了历史上第一个版本：Myriad MM.

5.2　title

这款温和且具有良好可读性的人文主义无衬线字体，集诸多当时最新的数字字体技术于一身. 后缀 MM，意为 Multiple Master，没有找到对应的中文译名，我们权且称之为「多母板技术」. Myriad 是最早采用 Multiple Master 技术的无衬线字体之一. 这项技术的原理是在坐标轴（Axis）的区间两端设计极限母板，中间的变量则采取线性或非线性变化，对于字体来说，字型的宽度、粗细甚至有无衬线，都可以在坐标轴上设置. 此外，MM 技术还提供了在小字号下屏幕显示的视觉修正（Optical Adjustment），也就是说，同一款字体，在小字号时，其字间距和笔画粗细，会被适当地放大. 而衬线字体，随着字号的变小，衬线会相对变

粗．视觉修正可以提高小字号字体的识别性，对于远低于印刷分辨率的电脑屏幕来说，也具有重要意义.

表 5-1　一个 normal 表格

功能	环境	code
表格	tabular	`\begin{tabular} ... \end{tabular}`
插图	figure	`\begin{figure} ... \end{figure}`
居中	center	`\begin{center} ... \end{center}`

在 Multiple Master 的时代，字号是从 6pt 到 72pt 之间非线性设置的．这一传统保留到了今天 Truetype 和 Opentype 的 Single Master 时代．Adobe 软件的字体下拉菜单，仍然只显示 6 到 72pt 的字号.

第 6 章　文本

6.1　文字与段落

本段使用 \cite Myriad，英语单词，意为「无数的」[? ? ?]. 同时，「Myriad」也是一款字体的名字. 由罗伯特 · 斯林巴赫（Robert Slimbach，1956 年–）和卡罗 · 图温布利（Carol Twombly，1959 年-）[? ? ? ?] 在 1990 年到 1992 年期间以 Frutiger 字体为蓝本为 Adobe 公司设计[?]. Myriad 是早期数码字体时代的先驱，[? ?] 伴随着技术的成长一路走来[? ?].

本段使用 \citep 如今，它更多地和我们相见在显示屏幕上[?]. 当然，还有那著名的标榜设计的电子品牌[? ?]. 1992 年，耗时两年开发的 Myriad 终于发布了历史上第一个版本：Myriad MM[? ? ? ? ?].

6.2　title

本段使用 \citet 这款温和且具有良好可读性的人文主义无衬线字体**?]**，集诸多当时最新的数字字体技术于一身. 后缀 MM，意为 Multiple Master，没有找到对应的中文译名**? ?]**，我们权且称之为「多母板技术」. Myriad 是最早采用 Multiple Master 技术的无衬线字体之一. 这项技术的原理是在坐标轴（Axis）的区间两端设计极限母板，中间的变量则采取线性或非线性变化，对于字体来说，字型的宽度、粗细甚至有无衬线**? ? ?]**，都可以在坐标轴上设置. 此外，MM 技术还提供了在小字号下屏幕显示的视觉修正（Optical Adjustment），也就是说，同一款字体，在小字号时，其字间距和笔画粗细，会被适当地放大. 而衬线字体，随着字号的变小，衬线会相对变粗. 视觉修正可以提高小字号字体的识别性，对于远低于印刷分辨率的电脑屏幕来说，也具有重要意义.

在 Multiple Master 的时代，字号是从 6pt 到 72pt 之间非线性设置的. 这一传统保留到了今天 Truetype 和 Opentype 的 Single Master 时代. Adobe 软件的字体下拉菜单，仍然只显示 6 到 72pt 的字号.

复旦大学
学位论文独创性声明

本人郑重声明：所呈交的学位论文，是本人在导师的指导下，独立进行研究工作所取得的成果．论文中除特别标注的内容外，不包含任何其他个人或机构已经发表或撰写过的研究成果．对本研究做出重要贡献的个人和集体，均已在论文中作了明确的声明并表示了谢意．本声明的法律结果由本人承担．

作者签名：_____　日期：_____

复旦大学
学位论文使用授权声明

本人完全了解复旦大学有关收藏和利用博士、硕士学位论文的规定，即：学校有权收藏、使用并向国家有关部门或机构送交论文的印刷本和电子版本；允许论文被查阅和借阅；学校可以公布论文的全部或部分内容，可以采用影印、缩印或其它复制手段保存论文．涉密学位论文在解密后遵守此规定．

作者签名：_____　导师签名：_____　日期：_____