TESTING FOR TOTAL INACCESSIBILITY IN EXAMINATIONS UNDER THE ADA: A CASE STUDY OF LOGIC GAMES

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In 2011, Angelo Binno filed suit against the American Bar Association, alleging that the so-called "logic games" portion of the LSAT was discriminatory against blind test takers under Title III of the Americans with Disabilities Act. Binno specifically argued that because the logic games require spatial reasoning and diagramming visual information, it is much more difficult for blind individuals to succeed on a test that has become a de facto requirement for admission to accredited law schools.

This Note first examines the requirements under the Americans with Disabilities Act for the administrators of tests like the LSAT. It discusses the various sections of the LSAT in detail, examining the logic games in light of recent studies of spatial reasoning in blind individuals. It then explores current court treatment of inaccessibility in testing, arguing that available accommodations are inadequate in aiding blind test takers on the LSAT's logic games. This Note finally explores potential remedies and ultimately recommends a prima facie framework for courts to address issues of total inaccessibility.

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"Our expectation is that we do what it takes to give individuals with disabilities not just physical access, but equal opportunity in our schools, in our workplaces, in all areas of our economy and society."[1]

I. INTRODUCTION

Judge Nicolas Pomaro has accomplished much in his life despite the fact that he has been totally blind since he was six years old.[2] He graduated from DePaul University in 1960.[3] Then John Marshall Law School

1. Tom Harkin, *Americans with Disabilities Act at 20: A Nation Transformed,* HUFFINGTON POST (July 26, 2010, 9:33 AM), http://www.huffingtonpost.com/sen-tom-harkin/ada-at-20-a-nation-transf_b_659001.html. Tom Harkin was the main sponsor of the ADA. *Americans with Disabilities Act of 1990*, BILL SUMMARY & STATUS–101ST CONGRESS (1989–1990)–S.933–THOMAS (LIBRARY OF CONGRESS), http://thomas.loc.gov/cgi-bin/bdquery/z?d101:S933 (last visited Aug.8, 2014).

2. Jim O'Donnell, *Judged on His Own Merits*, CHI. TRIB., Sept. 8, 1996, http://articles.chicagotribune.com/1996-09-08/features/9609080091_1_senior-judges-criminal-felony-blind.

3. *Id.*

in 1964.[4] He became an assistant state's attorney in 1966[5] and then was appointed to the bench in 1976.[6] He served for thirty-four years earning a reputation for being an exceptionally fair, diligent, intelligent, and sensitive jurist.[7] After retiring from the bench, he ran the Kane Legal Clinic at the Chicago Lighthouse for the blind.[8] Paul Rink, Pomaro's colleague at the clinic, is a retired lawyer who served on the Illinois Worker's Compensation Commission and is also totally blind.[9] Both these men, as accomplished as they are, went to law school in a different time and might have had their careers derailed before they began if they were applying today. The reason is that they did not have to take the exam that is now necessary for all prospective law students, the Law School Admissions Test ("LSAT").

Pomaro and Rink could have shared the plight of Angelo Binno. Like Pomaro and Rink, Binno has been blind his entire life.[10] He graduated from high school a year early, has held an internship at a law firm, graduated from college, worked for the Department of Homeland Security, and speaks three languages, yet he has been persistently denied admission from law schools.[11] He asserts that the reason is his low scores on the LSAT.[12] Specifically, he claims that the LSAT's so-called "logic games" portion of the exam is discriminatory toward blind test takers and in violation of Title III of the Americans with Disabilities Act ("ADA").[13] Alleging discrimination, he brought suit against the American Bar Association ("ABA") in 2011.[14] The case was dismissed on technical grounds,[15] but Binno has filed a notice of appeal and his lawyer

4. *Id.*

5. AP, *Judge Who Is Blind Relying on 'What's Inside' for Truth*, N.Y. TIMES, June 24, 1984, http://www.nytimes.com/1984/06/24/us/judge-who-is-blind-relying-on-what-s-inside-for-truth.html.

6. O'Donnell, *supra* note 2.

7. *Id.*; Jenn Ballard, *Pomaro to Retire After 49 Years*, 159 CHI. DAILY L. BULL. 49, (Mar. 12, 2013), http://news.jmls.edu/wp-content/uploads/2013/03/Pomaro-March12.pdf.

8. Maria Kantzavelos, *Pomaro to Host Meeting for Blind Lawyers*, 156 CHI. DAILY L. BULL., (May 24, 2010), *available at* http://chicagolighthouse.org/news/lighthouse/judge-pomaro-profiled-chicago-daily-law-bulletin.

9. *Renowned Chicago Attorney Paul W. Rink Has Joined the Kane Legal Clinic*, CHICAGO LIGHTHOUSE, http://chicagolighthouse.org/news/news/renowned-chicago-attorney-paul-w-rink-has-joined-kane-legal-clinic (last visited Aug. 8, 2014).

10. Steve Thorpe, *Judge Hears Suit over LSAT, ADA*, LEGAL NEWS (Dec. 20, 2011), http://www.legalnews.com/macomb/1138436.

11. Quinn Klinefelter, *Blind Would-Be Law Student Says Test Discriminates*, NPR (June 15, 2011, 12:01 AM), http://www.npr.org/2011/06/15/137179261/blind-law-student-claims-discrimination-in-testing.

12. *Id.*

13. Francine Cullari, *What's Wrong with This Picture?*, MICH. B.J. 42, 42 (2012).

14. *See id.*

15. Binno's case was dismissed for lack of standing. The presiding judge held that because there were no allegations that ABA directed that the logic games be included on the test that Binno's injury—not being admitted into law school—was not fairly traceable to the defendant. Furthermore, Binno's requested relief was too speculative of a cure. Binno had requested the ABA grant him a waiver from taking the LSAT, thus allowing schools to consider his merits without his low score weighing down his application. This argument was rebuked with the court stating that the schools could still require the test be used for admissions independently, thus making the assertion that a waiver would remedy Binno's injury speculative. Binno v. Am. Bar Ass'n, No. 11-12247, 2012 WL 4513617, at *4–5 (E.D. Mich. Sept. 30, 2012).

is preparing a parallel lawsuit against the Law Student Admissions Council ("LSAC").[16] While Binno tries to move his case forward, however, its fundamental question remains unanswered—is the test discriminatory?

The LSAT was created by the LSAC and first administered in 1948.[17] Through the 50s and 60s more and more law schools began to require applicants to take it until eventually the ABA mandated that law schools consider it as part of the application process in order to be certified.[18] The test itself is broken up into five thirty-five minute multiple-choice sections, four of which are graded.[19] The four graded sections consist of one section of reading comprehension questions, one section of analytical reasoning questions, and two sections of logical reasoning questions.[20] The fifth ungraded section is a "variable section" that may take the form of any one of the other three sections.[21] At issue are the analytical reasoning questions, also known as the "logic games." The LSAC characterizes these questions as follows:

> These questions measure the ability to understand a structure of relationships and to draw logical conclusions about that structure. You are asked to reason deductively from a set of statements and rules or principles that describe relationships among persons, things, or events. Analytical Reasoning questions reflect the kinds of complex analyses that a law student performs in the course of legal problem solving.[22]

The logic games section is broken down into four parts. Each part begins with a prompt establishing certain conditions of entities and then

16. Karen Sloan, *Suit Calls Test Fundamentally Unfair*, NAT'L L. J., Oct. 22, 2012, http://www.law.com/jsp/nlj/PubArticleNLJ.jsp?id=1202575623765&Suit_calls_test_fundamentally_unfair&slreturn=20130102193806.

17. William P. LaPiana, Rita and Joseph Solomon Professor, New York Law School, Keynote Address at the 1998 LSAC Annual Meeting: A History of the Law School Admission Council and the LSAT 2 (May 28, 1998) (http://www.lsac.org/docs/default-source/publications-(lsac-resources)/history-lsac-lsat.pdf) (the timeline at the bottom of the page indicates what year the LSAT was first administered).

18. The ABA does not actually require the LSAT specifically. It only requires a "valid and reliable" exam be considered by law schools as part of the admissions process. AM. BAR ASS'N, 2010–2011 ABA STANDARDS AND RULES FOR PROCEDURE FOR APPROVAL OF LAW SCHOOLS 36 (2010) (Standard 503). The LSAT, however, is presumptively valid and reliable and if a school wants to use any other test the burden falls on the school to prove its validity. *Id.* (Interpretation 503–1). Since there is no other commercially available test that is deemed to be "valid and reliable," the LSAT is essentially a *de facto* requirement. The ABA also allows for variances, but all accepted variances thus far are school specific and none have to do with accommodations for the disabled. *Id.* at 47–48, 157.

19. *About the LSAT*, LSAC, http://lsac.org/JD/LSAT/about-the-lsat.asp (last visited Aug. 8, 2014).

20. *Id.*

21. *Id.* Although examinees know that one of their sections will not count, they are not informed as to which specific section is the ungraded one. Thus, examinees need to treat each section with equivalent importance. *Id.* This means that it is possible for a disabled examinee to take an inaccessible section one more time than they would otherwise need to take it doubling the frustration they would already be feeling from the discriminatory section. *Id.*

22. *Id.*

asks questions based on the information in the prompt.[23] The directions for the questions say that "it may be useful to draw a rough diagram" to answer some of the questions.[24] The consensus amongst the LSAT test prep services is that diagramming the "entities" listed in each question in order to visualize how they relate to each other is the key to successfully answering this section's questions.[25] In fact, The Princeton Review characterizes the LSAT's recommendation of drawing diagrams as a "misleading" understatement, saying that the test's recommendation is like saying "it may be useful to train before running your first marathon."[26]

This raises a couple of fairly obvious questions. First, how is a totally blind test taker supposed to correctly answer questions when diagramming is the recommended, albeit not required, strategy for answering them? Second, if the questions are significantly more difficult for totally blind test takers to correctly answer, does the section violate Title III of the ADA?[27]

The dilemma in answering this question is that the standards are not as clear as they could be. The ADA mandates that the tests must be "accessible" to the disabled[28] and the Department of Justice has clarified that ambiguous term by promulgating its "best ensure" standard.[29] The regulations also state that modifications and auxiliary aides must be provided so that a test becomes accessible to a disabled examinee.[30] This regulation—and subsequent court decisions—operates under the assumption that any given test *can* be accessible as long as the right accommodation is given. This assumption is misplaced. What if an exam is

23. ADAM ROBINSON & KEVIN BLEMEL, CRACKING THE LSAT: 2013 EDITION 126 (Selena Coppock ed., 2012).

24. *Id.* (citing the instructions on the test).

25. *See e.g.*, *id.* at 128–29 ("Games are a visual exercise. . . . Words don't help you; images do. . . . The LSAT writers are banking on the fact that most test takers will try to organize all this information in their heads in their rush to finish. That's a recipe for disaster."); KAPLAN PUBLISHING, LSAT: COMPREHENSIVE PROGRAM 75 (2009 ed. 2008) ("Developing good scratch work will help your performance on Logic Games. Although some rare games aren't amenable to scratch work, for most games you'll find it helpful to create a master sketch that encapsulates the game's information in an easy-to-follow form. This gives your eye a place to gravitate towards when you need information, and helps to solidify in your mind the action of the game, the rules and whatever deductions you made."); *Diagramming Techniques: Analytical Reasoning (Logic Games)*, ALPHA SCORE: ONLINE LSAT TEST PREPARATION, http://www.alphascore.com/resources/free-lsat-course/diagramming-techniques-analytical-reasoning-logic-games/ (last visited Aug. 8, 2014) ("Effective diagramming techniques is critical to your success on the LSAT analytical reasoning section. There are a few people who can look at a logic game and ace it without any diagrams. . . . For the rest of us, excellent diagramming skills are required."); *How to Master LSAT Logic Games*, EHOW, http://www.ehow.com/how_4937156_master-lsat-logic-games.html (last visited Aug. 8, 2014) ("Practice drawing diagrams for the main types of games . . . ."); *LSAT Analytical Reasoning (Logic Games) Tutorial*, GRADUATE ADMISSIONS TESTING, http://www.west.net/~stewart/lsat/logic-games-tutorial.htm (last visited Mar. 16, 2014) ("Very few test takers can handle a typical LSAT logic game without scratching out some sort of diagram that depicts the game's information visually. So if there is any single key to mastering LSAT Analytical Reasoning, it is to learn how to devise effective diagrams for the different games.").

26. ROBINSON & BLEMEL, *supra* note 23, at 128.

27. 42 U.S.C. § 12189 (2012).

28. *Id.*

29. 28 C.F.R. § 36.309(b)(1)(i) (2013). For further discussion of this standard see *infra* Subsection II.A.2.

30. 28 C.F.R. § 36.309(b)(3).

not partially inaccessible for someone with a disability (and ready to be remedied with the proper accommodation) but totally inaccessible? What if this inaccessibility is not caused by the test's administration but by its very questions? This Note seeks to establish that not only is such a situation possible, it is the status quo with the logic games on the LSAT. It further asserts that this violates the accessibility standard of the ADA.

Part II of this Note is broken down into three Sections. First, it looks at the history of the passage of the ADA and why Congress included the test taking language contained in Title III. This Section also looks at how the language has subsequently been interpreted by the Department of Justice and the courts. Second, it discusses the different sections of the LSAT in detail. Last, it explains what spatial reasoning is and the ways in which it functions differently in blind individuals than in sighted ones. Part III is broken down into three Sections. First, it examines how courts currently treat inaccessibility claims and why the status quo is inadequate when an exam is totally inaccessible. Second, it explains why the logic games are totally inaccessible and what remedy should be available that effectuates the ADA's goals and is consistent with its regulations. Finally, Part IV recommends that courts analyze claims such as Binno's under a *prima facie* framework based on the Department of Justice's regulations that will bring predictability to such claims in the future.

II. BACKGROUND

The ADA is broken down into a four-part structure. Title I covers employment.[31] Title II covers public services.[32] Title III covers public accommodations and service entities including entities that administer exams.[33] Title IV contains miscellaneous provisions.[34] This Note discusses Title III, specifically its provision on testing. Section A of this Part of the Note discusses the passage of the ADA, the policy goals that it was meant to achieve, subsequent regulations, and court interpretation. Section B describes the scored sections of the LSAT as well as some of the strategies recommended for answering their questions. Section C discusses how spatial reasoning—the type of reasoning utilized in completing the logic games—functions in blind individuals.

A. The ADA

The ADA was a comprehensive bill to fight discrimination against the handicapped.[35] This Section discusses the passage of the ADA, fol-

31. 42 U.S.C. §§ 12111–12117 (2012).
32. *Id.* §§ 12131–12165.
33. *Id.* §§ 12181–12189.
34. *Id.* §§ 12201–12213.
35. 42 U.S.C. § 12101(b)(1) ("It is the purpose of this [a]ct to provide a clear and comprehensive national mandate for the elimination of discrimination against individuals with disabilities.").

lowed by the subsequent regulations passed by the Department of Justice to supplement the act in regards to testing and how to best make examinations "accessible." Second, it discusses a specific challenge to the standard promulgated by the Department of Justice and why the Ninth Circuit upheld it.

1. The Passage of the ADA

In passing the ADA, Congress found that "discrimination against individuals with disabilities persists in . . . education"[36] and that "the continuing existence of unfair and unnecessary discrimination and prejudice denies people with disabilities the opportunity to *compete on an equal basis* . . . ."[37] The goal of the ADA was "to provide a clear and comprehensive national mandate for the elimination of discrimination against individuals with disabilities."[38]

One area where Congress sought to remedy discrimination against the disabled was in the area of examinations. Congress's first attempt to protect the rights of the disabled was with the Rehabilitation Act of 1973.[39] Section 504 of this act indirectly prohibited discrimination on state certification and licensing examinations that received federal money.[40] Therefore, any licensing or certification examination designated as such by a state and receiving federal assistance would be covered under the act.

This narrow field, however, necessarily left any exam not receiving federal money outside of the jurisdiction of the act.[41] Congress sought to "fill the gap that is created when licensing, certification, and other testing authorities are not covered by section 504 . . . ." with section 309 of the ADA.[42] In pertinent part, the ADA mandates that, "[a]ny person that offers examinations or courses related to applications, licensing, certification, or credentialing for secondary or post-secondary education, professional, or trade purposes shall offer such examinations or courses *in a place and manner accessible to persons with disabilities or offer alternative accessible arrangements for such individuals*."[43] This provision was included to make sure that disabled individuals were not prevented from exercising educational, professional, or trade opportunities because the exam was administered without necessary modifications.[44]

36. 42 U.S.C. § 12101(a)(3).
37. *Id.* § 12101(a)(8) (emphasis added).
38. *Id.* § 12101(b)(1).
39. Rehabilitation Act of 1973, Pub. L. No. 93-112, 87 Stat. 355 (1973) (codified as amended at 29 U.S.C. §§ 701–797 (2012)).
40. 29 U.S.C. § 794(b).
41. Nondiscrimination on the Basis of Disability by Public Accommodations and in Commercial Facilities, 56 Fed. Reg. 35,544, 35,572 (July 26, 1991) (codified at 28 C.F.R. pt. 36.309).
42. *Id.*
43. 42 U.S.C. § 12189 (emphasis added).
44. Nondiscrimination on the Basis of Disability by Public Accommodations and in Commercial Facilities, 56 Fed. Reg. at 35,572.

2. The Department of Justice and Section 36.309's "Best Ensure" Standard

The key word in the ADA statute is "accessible."[45] Courts have interpreted this term as to fall short of requiring an exam designed for a disabled individual to be "exactly comparable" to the original.[46] Instead, the Department of Justice supplemented the law by promulgating the "best ensure" standard.[47] This standard mandates that examinations that are administered to disabled individuals who suffer from sensory, manual, or speaking skills are developed to best ensure that "the examination results accurately reflect the individual's aptitude or achievement level or whatever other factor the examination purports to measure, *rather than reflecting the individual's impaired sensory, manual, or speaking skill . . . .*"[48] In order to achieve this goal, the manner in which exams are given may have to be adapted to suit the disabled individual.[49] In addition, private entities offering exams must provide disabled test takers an appropriate auxiliary aid to allow them to properly take the test.[50] Auxiliary aids may include "[b]railed or large print examinations and answer sheets or qualified readers [and transcribers] for individuals with visual impairments . . . ."[51] The regulations also made an exception against granting auxiliary aids that would "fundamentally alter the measurement of the skills or knowledge the examination is intended to test . . . ."[52] An auxiliary aid can also be denied if it would cause an "undue burden" for the private entity offering the exam.[53]

3. Enyart v. National Conference of Bar Examiners, Inc.

The Ninth Circuit recently examined the validity of the best ensure standard in *Enyart v. National Conference of Bar Examiners, Inc.*[54] The plaintiff, Stehpanie Enyart, was a 2009 graduate from UCLA's Law School who suffered from a form of juvenile macular degeneration.[55] She requested accommodations on the Multistate Bar Exam ("MBE") portion of the California Bar Exam as well as the the Multistate Professional Responsibility Exam ("MPRE").[56] To compensate for her disability, Enyart requested extra time, a private room, hourly breaks, permission to bring and use her own lamp, a digital clock, sunglasses, a yoga mat,

45. 42 U.S.C. § 12189.
46. Doe v. Nat'l Bd. of Med. Exam'rs., 199 F.3d 146, 156 (3d Cir. 1999).
47. 28 C.F.R. § 36.309(b)(1)(i) (2013). Hereinafter, this Note refers to the standard promulgated by the Department of Justice in 28 C.F.R. § 36.309 as "§36.309," "the best ensure standard" and "the regulation(s)."
48. *Id.* (emphasis added).
49. 28 C.F.R. § 36.309(b)(2).
50. 28 C.F.R. § 36.309(b)(3).
51. *Id.*
52. *Id.*
53. *Id.*
54. 630 F.3d 1153 (9th Cir. 2011).
55. *Id.* at 1156.
56. *Id.*

and medication to treat migraine headaches during the exam.[57] She also requested that she take the exam on a laptop equipped with assistive technology software known as JAWS and ZoomText.[58]

The NCBE argued against the "best ensure" standard, claiming that it was invalid and that the court should instead apply a reasonableness standard.[59] The Ninth Circuit disregarded this request and instead deferred to the Department of Justice's interpretation, holding that the statute is ambiguous on this issue and that the department's interpretation was predicated on a permissible reading of the ADA.[60] The court then read "so as to best ensure" as to be equivalent to stating that the test grant disabled examinees "an equal opportunity to demonstrate their knowledge or abilities to the same degree as nondisabled people taking the exam . . . ."[61]

The court ultimately held that the district court had not abused its discretion in holding that Enyart would likely succeed on the merits.[62] The accommodation originally offered by NCBE was a closed-circuit television ("CCTV") to magnify the text of the exam.[63] Use of a CCTV, however, gave Enyart "eye fatigue, disorientation, and nausea . . . ."[64] This ultimately meant that use of a CCTV would not best ensure the exam was accessible to her.[65]

The court also made three relevant observations. The first was that an accommodation that involved auditory input alone would not make the test accessible because it would not sufficiently enable Enyart to "comprehend and retain the language used on the exam . . . ."[66] The second is that the case called for a case specific evaluation of the merits of Enyart's claim.[67] The court pointed out that although she had used different auxiliary aids than the ones requested on past tests such as the SAT (a large print exam book) and the LSAT (a human reader and scribe) those past accommodations were relevant but not conclusive in evaluating how to make the MPRE and MBE accessible.[68] In reaching this conclusion, the court pointed out that those exams were taken a number of years earlier and that Enyart's disability was a progressive one, making previously sufficient accommodations insufficient.[69] "More-

57. *Id.*
58. *Id.*
59. *Id.* at 1161.
60. *Id.* Specifically, the court held that the regulation was entitled to so—called *Chevron* deference, which states that when a statute is ambiguous that courts should defer to the appropriate federal agency's regulations, provided that the regulation is not arbitrary and capricious. Chevron U.S.A., Inc. v. Nat'l Res. Def. Council, Inc., 467 U.S. 837, 842–43 (1984).
61. Enyart v. Nat'l Conference of Bar Exam'rs, 630 F.3d 1153, 1162 (9th Cir. 2011).
62. *Id.* at 1163.
63. *Id.* at 1156.
64. *Id.* at 1163.
65. *Id.*
66. *Id.*
67. *See id.*
68. *Id.*
69. *Id.*

over," the court said, "assistive technology is not frozen in time: as technology advances, testing accommodations should advance as well."[70]

The third observation was that the evaluation was an individualized one not an automatic and mechanical one.[71] NCBE pointed out that the ADA, Section 36.309, a Department of Justice settlement agreement, and a resolution of the National Federation of the Blind had expressly identified the auxiliary aids it had offered to provide.[72] Therefore, the NCBE reasoned courts should not require it to do more. Not so said the Ninth Circuit. "The issue in this case is not what might or might not accommodate other people with vision impairments, but what is necessary to make the MPRE and the MBE accessible to Enyart *given her specific impairment and the specific nature of these exams*."[73]

B. The LSAT

The LSAT is a three and a half hour exam in six parts. There are five multiple-choice sections and an essay.[74] The multiple-choice sections are broken up into three different categories: "logical reasoning," reading comprehension, and "analytical reasoning," (the logic games). Of the five multiple-choice sections only four are scored.[75] The fifth, unscored section is a so-called "variable section" that can be any of the three categories.[76] Examinees have thirty-five minutes to complete each section (provided they do not need extra time as an accommodation).[77] This Section of this Note describes the types of questions examinees see in each part of the exam. It will also discuss the method of how to answer these questions as recommended by Kaplan testing service.[78] It will conclude with a discussion of the accommodations offered by the LSAC. Why the logic games may be considered inaccessible for totally blind individuals in spite of the offered accommodations is discussed in Part III of this Note.

70. *Id.*
71. *Id.*
72. *Id.*
73. *Id.* (emphasis added).
74. This Note declines to discuss the essay portion of the exam. There are two reasons for this. First, writing essays is fundamentally different from answering multiple choice questions and therefore there is no need to contrast what makes the logic games different from the essay, unlike the logical reasoning and reading comprehension sections. Second, the essay is not scored, so if the essay were discriminatory, this section would not affect the examinee's score. Thus the effects of said discrimination would not be felt and remain unknown. *About the LSAT*, *supra* note 19.
75. *Id.*
76. *Id.*
77. *Id.*
78. Kaplan Test Prep's test training programs are accredited by the Department of Education's Accrediting Council for Continuing Education and Training. *Kaplan Test Prep and ACCET*, KAPLAN TEST PREP, http://www.kaptest.com/assets/content/popup/accet.html (last visited, Aug.8. 2014). Kaplan's instructions are being singled out in this Section because of the company's credibility in being accredited and because the advice given is similar in nature to advice from other testing services and websites. *See generally* ROBINSON & BLEMEL, *supra* note 23.

1. Logical Reasoning

There are two scored logical reasoning sections, thus comprising half of an examinee's score.[79] Each question begins with a short paragraph or prompt followed by a question based on the content of that paragraph.[80] These questions typically ask about assumptions made by the preceding prompt including: ways to strengthen or weaken it, any flaws contained in it, inferences the prompt makes, the method of argument in the prompt, paradoxes contained in the prompt (and how to reconcile them), principles relied on in the prompt, what the point at issue is, and questions asking what a parallel line of reasoning looks like.[81]

According to the LSAC this section measures "the ability to analyze, critically evaluate, and complete arguments as they occur in ordinary language."[82] Strategies used to answer these questions include: using formal logic, recognizing the difference between necessary and sufficient conditions, and knowledge of the types of wrong answers that the test writers like to put on the test.[83] According to the Kaplan testing service the method of answering these can be broken down into four parts: (1) read the actual question being asked first so you know what to look for in the prompt, (2) read the prompt critically and actively "pinpointing evidence and conclusion, and forming a sense of how strong or weak the argument is" while keeping the question that is being asked in mind, (3) think critically about the answer, or (4) read and evaluate the answer choices and see which one conforms with what you had in mind during step three.[84] It should be pointed out that none of these strategies involve drawing visual representations of the information to help process it.

2. Reading Comprehension

The reading comprehension section of the exam consists of four separate selections of reading material followed by five to eight questions pertaining to the preceding passage.[85] According to the LSAC "[t]hese questions measure the ability to read, with understanding and insight, examples of lengthy and complex materials similar to those commonly encountered in law school."[86] Four main types of questions appear.

79. KAPLAN PUBLISHING, *supra* note 25, at 5.
80. *See id.* at 37.
81. *Id.* at 30–36.
82. *About the LSAT*, *supra* note 19.
83. The formal logic knowledge needed can include knowing what the contrapositive of a statement looks like which is formed by both reversing and negating the terms in the statement. So if the original statement reads, "if X, then Y," the contrapositive of that statement would read, "if not Y, then not X." KAPLAN PUBLISHING, *supra* note 25, at 28. Common wrong answer choices can be "outside the scope" of the prompt, extreme statements, distortions, answers that are half right and half wrong, the exact opposite of the correct answer, and irrelevant comparisons. *Id.* at 26–27.
84. *Id.* at 37–38.
85. *About the LSAT*, *supra* note 19.
86. *Id.*

They include questions that ask the examinee to sum up the overall ideas, intentions, or structure of the passage ("global questions"); questions that ask about the function of certain sentences or the reasoning behind them ("logic questions"); questions that ask the examinee to locate which answer must be true based on the information in the passage ("inference questions"); and questions that ask about specific details from the paragraph ("detail questions").[87]

According to Kaplan the method for answering the reading comprehension questions can be broken down into five parts: (1) reading the passage critically and making a roadmap of it by noting the gist of each paragraph, (2) reading the question stem, noting what type of question it is, (3) researching the relevant text using the roadmap and looking back at relevant language, (4) making a prediction on what the answer is, and (5) going to the choices and determining which is the right answer.[88] While road mapping may be accomplished by writing the relevant information down, it can also be done in a person's head if they prefer. There is nothing about the nature of the reading comprehension questions that necessitates visual representations.

3. Analytical Reasoning (Logic Games)

The logic games section consists of four sets of questions based on a scenario with a set of rules.[89] Each scenario is an individual "game." There are between twenty-two and twenty-four questions in a logic games section.[90] According to the LSAC the games are supposed to "measure the ability to understand a structure of relationships and to draw logical conclusions about that structure."[91]

There are four main types of questions in the games section: acceptability questions; questions that bring a new rule into the scenario; questions asking the examinee to make a complete and accurate list of the entities involved; and questions asking what could, could not, must, or must not occur based on the rules.[92] There are three main types of actions being asked of the examinee in the games—sequencing, grouping, and matching.[93] Generally there is also a game on each test that is a hybrid of two of the three main types of games.[94] Regardless of the type of game, Kaplan's general advice for each question set starts with reading the game's introduction to get a sense of the situation, the action being asked, and the limitations governing the game.[95] Next the examinee draws a sketch or other scratch work to help keep track of the rules and

87. KAPLAN PUBLISHING, *supra* note 25, at 120–22.
88. *Id.* at 122–26.
89. *Id.* at 6.
90. *Id.*
91. *About the LSAT*, *supra* note 19.
92. *See* KAPLAN PUBLISHING, *supra* note 25, at 77.
93. *See id.* at 78–88.
94. *See id.* at 88.
95. *Id.* at 78–88.

act as a place to write in new information.[96] Then as rules are added and the examinee thinks through the meaning and implications of each rule she can build the new rule directly into the sketch to jot it down in shorthand.[97] Finally, common elements among the rules are combined in order to make deductions.[98]

Each of the three main types of games, as well as Kaplan's method of sketching the game, is discussed below.

a. Sequencing Games

Sequencing games involve putting entities in a particular order.[99] This may be from left to right, top to bottom, or as days of the week. There are two potential types of sequencing games: strict and loose.[100] Strict sequencing games place the entities in strictly defined position (first, third, last, etc.) while loose games rank the entities only in relation to one another.[101]

The method Kaplan recommends to answer questions in sequencing games is to sketch out the entities based on the rules listed.[102] In strict games an examinee may place as many lines as there are entities on the page and then write in entities that have concrete placements (i.e., X is third).[103] Sometimes the examinee may be encouraged to draw two or three sketches if the rules call for it.[104] For example, if X is always third and Y is always next to X, then the examinee may draw one sketch where Y is in the second position and one where Y is in the fourth. The sketches for loose sequencing games will appear to be a little more freeform as the entities will be arranged based on their relation to each other in the rules with short lines connecting them and some entities branching out from the rest of the diagram.[105]

b. Grouping Games

Grouping games ask examinees to distribute the entities into different groups and subgroups.[106] There are two different types of grouping

96. *Id.*
97. *Id.*
98. *Id.*
99. *Id.* at 78.
100. *Id.* at 79.
101. *Id.*
102. *Id.*
103. *See id.*
104. *Id.*
105. *See, e.g.*, Steven Schwartz, *Free LSAT Logic Game: Pure Sequencing*, LSAT BLOG: ACE THE LSAT (Aug. 28, 2009), http://lsatblog.blogspot.com/2009/08/logic-game-pure-sequencing.html (the set-up and question); Steve Schwartz, *Logic Games Pure Sequencing Diagram: Explanation*, LSAT BLOG: ACE THE LSAT (Sept. 11, 2009), http://lsatblog.blogspot.com/2009/09/logic-games-pure-sequencing-diagram.html (the accompanying sketches of the explanation).
106. KAPLAN PUBLISHING, *supra* note 25, at 81.

games—selection games and distribution games.[107] Occasionally a grouping game will be a hybrid of these two types.[108]

Selection games begin with a large group of entities, which is sometimes broken down into smaller subgroups, and then asks the examinee to pick out which entities conform to the given rules.[109] To answer the questions in a selection grouping game Kaplan recommends writing out the entities (using the first letter of each entity to represent each one if the entities are not already in letter form) and circling entities that the rules state or imply should be selected while crossing out the entities that should not.[110] For rules that cannot be built into the sketch notations for "if then" scenarios and combinations that can be written to the side.[111]

Distribution games ask the examinee to place the entities into two or more possible locations.[112] To answer the questions in a distribution grouping game Kaplan recommends sketching out each subgroup that an entity can possibly go in and placing certainties into each group if the rules allow.[113] If the rules state that an entity can never go in a group, write that into the sketch also.[114] If two entities will always be together, then this may allow for multiple sketches or this information can be noted off to the side.[115]

c. Matching Games

Matching games ask examinees to match up various listed characteristics, often many of them, about the entities in a group.[116] Kaplan recommends making a list or a grid to keep track of all the entities and their characteristics because "organization is especially crucial."[117] Characteristics can be distinguished from each other by using lowercase for one category and capital letters for another.[118]

4. Accommodations offered by the LSAC

The LSAC does already offer some accommodations for the LSAT. To request an accommodation applicants must submit a candidate form along with current documentation of the applicant's disability from a qualified/licensed evaluator who diagnosed the condition.[119] The form

107. *Id.* at 81.
108. *Id.*
109. *Id.*
110. *Id.*
111. *See id.* at 81–83.
112. *Id.* at 81.
113. *See id.* at 83–85.
114. *See id.*
115. *See id.*
116. *Id.* at 85.
117. *Id.*
118. *Id.*
119. Law School Admissions Council, *Candidate Form*, LSAC, http://www.lsac.org/docs/default-source/jd-docs/accommodationsform-non.pdf.

has check boxes for visual, physical, cognitive, psychological, and hearing disorders, as well as an "other" box.[120] It then asks the applicant to describe how the condition would impact his or her ability to take the LSAT and why an accommodation should be granted.[121] Some of the accommodations that are offered that would be of help to visually impaired individuals are a braille version of the exam, a large print test book, additional time on the multiple choice sections, additional time on the writing sample, use of a reader whom is provided by LSAC, use of a scribe whom is provided by LSAC, and breaks between sections.[122]

The accommodations currently offered by the LSAC seemingly ensure that the exam is accessible to sighted individuals with other disabilities.[123] As will be discussed below, however, the accommodations are not adequate for a totally blind examinee when it comes to the logic games.

C. Spatial Reasoning

Drawing sketches on the logic games is recommended because it helps examinees map out the space where the entities exist and orient where they would go as if they existed in a physical space. One of the ways that people comprehend language is that they will construct mental representations of situations when reading about or listening to a scenario.[124] In this way the logic games can be said to require spatial reasoning in order to answer their questions.[125] While blind individuals may not be able to see, they do possess orientation and mobility skills that can allow for them to learn spatial mapping and orientation skills.[126]

This is mainly done at the perceptual and conceptual level.[127] At the perceptual level the inability to see is compensated for by the heightened ability of other senses.[128] On the conceptual level blind individuals learn strategies on how to use the information they are taking in to scan their environment and navigate the physical space around them.[129] The latter typically takes two forms: route and mapping based strategies.[130] This

120. *Id.*
121. *Id.*
122. *Id.*
123. *But see* Karen Sloan, *Heat is on for Law School Test: Feds Add to Pressure to Make the LSAT More Accessible to the Disabled*, NAT'L L.J., (Oct. 22, 2012), *available at* http://www.law.com/jsp/nlj/PubArticleNLJ.jsp?id=1202575623627 (discussing other lawsuits against the LSAC over the LSAT being inaccessible. Angelo Binno is not one of the plaintiffs discussed, nor are the logic games.)
124. Matthijs L. Noordzij et al., *The Influence of Visual Experience on the Ability to Form Spatial Mental Models Based on Route and Survey Descriptions*, 100 COGNITION 321, 322 (2006).
125. Merriam-Webster's dictionary defines spatial as "of or relating to facility in perceiving relations (as of objects) in space". *Definition of Spatial*, MERRIAM-WEBSTER, *available at* http://www.merriam-webster.com/dictionary/spatial (last visited Aug. 8, 2014).
126. Orly Lahav & David Mioduser, *Blind Persons' Acquisition of Spatial Cognitive Mapping and Orientation Skills Supported by Virtual Environment*, 4 INT. J. DISABILITY & HUM. DEV. 231, 231 (2005).
127. *Id.*
128. *Id.*
129. *Id.*
130. *Id.*

Section discusses these strategies, explaining why route strategies are favored by the visually impaired. Part III of this Note asserts that the logic games section requires a combination of these two abilities, but ultimately that mapping is more important on the test.

1. Route Strategies

Route strategies consist of remembering specific routes or pathways to follow.[131] This method is generally favored by the visually impaired.[132] The frame of reference for a route-based strategy is the location of an individual in a physical space and all subsequent information is then based on that initial frame of reference.[133] One possible explanation for the favorability of this strategy is that the visually impaired receive training in orientation and mobility in order to hone their navigation skills in relation to their own body.[134] Unfortunately, this method is fairly inflexible.[135] "Unless complex inferences are made, route-based representations cannot be easily modified to find alternative pathways or shortcuts."[136]

2. Mapping Strategies

Mapping strategies, also known as survey knowledge, refers to topographical properties of the environment.[137] "This type of representation encodes a spatial layout from an external perspective (an aerial or map-like view) and contains information not obtainable from direct environmental experience."[138] The long held theory has been that the visually impaired struggle to create survey-based spatial models, but two recent studies show varying results in regards to the visually impaired's ability to form survey-based spatial descriptions.[139]

In the first study by Matthijs Noordzij, Sander Zuidhoek, and Albert Postma, participants—consisting of thirteen early blind, seventeen late blind, and sixteen sighted individuals who were blindfolded[140]—

131. Delphine Picard & Rene Pry, *Does Knowledge of Spatial Configuration in Adults with Visual Impairments Improve with Tactile Exposure to a Small-Scale Model of Their Urban Environment?*, J. VISUAL IMPAIRMENT & BLINDNESS 199, 199–200 (2009).

132. *Id.* at 200; *see also* Noordzij et al., *supra* note 124, at 336.

133. *See* Picard & Pry, *supra* note 131, at 200 ("The predominant use of route-based spatial knowledge is also partially related to the reliance of people with visual impairments on body-centered proprioceptive and kinesthetic information . . . ." (citation omitted)).

134. Noordzij et al., *supra* note 124, at 336–37 ("[B]lind people are trained on navigational skills in relation to their own body. They do not learn things on the basis of cues such as 'go to other side of the park and end up between the wooden bench and the large chestnut tree'. Instead, it makes more sense to specify a route through the park on the basis of intermittent landmarks in relation to their own body position.").

135. *Id.*

136. *Id.*

137. *Id.*; Carla Tinti et al., *Visual Experience is Not Necessary for Efficient Survey Spatial Cognition: Evidence from Blindness*, 59 Q. J. EXPERIMENTAL PSYCHOL. 1306, 1308 (2006).

138. *Id.*

139. Noordzij et al., *supra* note 124, at 336; Tinti et al., *supra* note 137, at 1308.

140. Noordzij et al., *supra* note 124, at 326.

were given two types of descriptions of a zoo and a mall: one with a route perspective and one with a survey perspective.[141] The study found that "participants both with and without visual experience formed a spatial mental model of the descriptions in which the distance between individual objects was encoded."[142] In recalling object locations, however, sighted participants had more accurate responses and only after studying survey descriptions not route descriptions.[143] Furthermore, "[b]lind participants made more errors after studying a survey description than a route description," and the early blind participants scored the lowest of all participants in both categories.[144] Ultimately the study found that sighted individuals build up spatial mental models more efficiently based on survey descriptions than route descriptions while the opposite was true for blind individuals.[145]

The other study by Carla Tinti, Mauro Adenzato, Marco Tamietto, and Cesare Cornoldi reached a different conclusion.[146] This study took early blind, late blind, and blindfolded sighted persons and asked them to walk around an unfamiliar room with a cane to assist their movement.[147] They were not given route-based instructions of where to go but instead were instructed to walk in a corridor from a start point to a stop point.[148] Once at the end they were asked to walk back to the start point using the shortest path possible.[149] After this phase participants were asked to draw the pathway that they had just navigated.[150] The sighted participants were still blindfolded.[151]

The study found that the most likely way that participants performed the tasks given to them was through survey representation.[152] It found that the blind participants actually performed the tasks better than the sighted group.[153] It also found that there was no difference in performance between the early blind and late blind participants.[154] In reporting these results the study noted that they were "counterintuitive and inconsistent with results from any prior study."[155] In light of this, the study qualified these conclusions, saying that it is possible that the sighted participants were thrown off more by the verbal counting than the blind participants who are used to relying on other senses as they navi-

141. *Id.* at 327.
142. *Id.* at 334.
143. *Id.* at 336.
144. *Id.*
145. *Id.*
146. Tinti et al., *supra* note 137, at 1306.
147. *Id.* at 1311.
148. *Id.*
149. *Id.*
150. *Id.* In order to prevent participants navigating the corridor from counting how many steps they took before each turn or memorizing angle of each turn, participants were asked to count backwards from one hundred as they were walking. *Id.*
151. *Id.*
152. *Id.* at 1317.
153. *Id.*
154. *Id.*
155. *Id.*

gate without sight, and that this may have distorted the results.[156] In fact this study stated, "we cannot reach any clear conclusion from the results" of that particular experiment because "the relative contribution of visual experience cannot be disentangled from the habit of using other modalities to explore environments when the use of vision is not possible."[157]

The study also conducted a second experiment based on the first with similar results.[158] Ultimately the people conducting the survey emphasized that their results were not meant to contradict findings that came before them, only that vision "is not strictly necessary" to set up spatial coding mechanisms because the visual role can be replaced by nonvisual modalities.[159] How these two studies' results impact the analysis of the logic games' accessibility under the ADA is discussed in Part III.

III. ANALYSIS

In the twenty years since the passing of the ADA, Title III's "accessibility" language might be the least written about and least litigated aspect of the law. As of yet the Supreme Court has not weighed in on its interpretation. While the lack of litigation may be good for the already congested court system, it has also meant that the courts have yet to address a hard question: what to do when there are no external accommodations that can make an exam accessible. Put another way, the exam is written and formatted in a way that makes it significantly more difficult for an examinee with a disability to succeed, no matter what accommodation is granted short of changing the exam itself. This Note refers to this scenario as total inaccessibility.

This Part explains what total inaccessibility is, how it differs from the current jurisprudence of Title III, and how it can be applied. Section A explains how historically the litigation involving exam accessibility has failed to address total inaccessibility. Section B explains why the logic games are totally inaccessible.

A. The Current Application of Accessibility Is Based on Physical Administration and External Accommodations

In 2012, the Department of Fair Employment and Housing sued the LSAC over the LSAT.[160] The department listed five causes of action

156. *Id.* ("A possible intervening factor is that . . . participants with congenital blindness and sighted participants differ also in their habit of relying on other sensory modalities for spatial coding. . . . Perhaps the worse performance of our blindfolded sighted participants was determined by our unusual and difficult condition, consisting in a temporary lack of vision associated with their lack of skill in using other nonvisual modalities when the use of vision is prevented.").

157. *Id.* at 1317–18.

158. *Id.* at 1323–24.

159. *Id.* at 1324.

160. Dep't. of Fair Emp't and Hous. v. Law Sch. Admission Council, Inc., 896 F. Supp. 2d 849 (N.D. Cal. 2012).

against the LSAC, all of them involving the technical administration of the exam—such as flagging exam scores—and none of them addressing the substantive nature of the exam itself.[161] The logic games were only mentioned once during a general background portion of the exam explaining its elements, but the actual nature of the exam was completely ignored.[162] Basically, a federal agency very recently saw fit to sue the LSAC over an allegedly discriminatory practice on how the exam is administered but completely ignored an entire substantive section of the test that could be discriminatory. It is possible that the department looked at the substance of the exam and did not deem anything to be wrong with it tacitly endorsing it by omission. As this Note will later explain, however, even assuming *arguendo* that the department did approve the substance of the exam they were wrong to do so.

Department of Fair Housing v. LSAC is a unique case in and of itself. Most Title III examination cases involve private litigants suing for preliminary injunctions to allow a certain accommodation to be used.[163] It is during the discussion of a plaintiff's success on the merits that courts address accessibility and the Department of Justice's "best ensure" standard. This was the case in *Enyart* where the issue was whether or not the NCBE had to supply a ZoomText and Jaws to the plaintiff for the MBE and MPRE.[164]

The case history of Section 36.309 is full of similar cases. The plaintiff in *Bonnette v. District of Columbia Court of Appeals* wanted to be able to use a screen-reading program known as Job Access with Speech ("JAWS") on the Multistate Bar Exam.[165] The plaintiff in *Jones v. National Conference of Bar Examiners* was requesting use of a laptop equipped with ZoomText 9.12 to read the examination materials in addition to extra time and breaks.[166] In *Doe v. National Board of Medical Examiners* a plaintiff with multiple sclerosis requested extra time to take the United States Medical Licensing Examination, as well as special seating assignment close to the restroom so he could frequently stop and stretch his muscles and take "micro-breaks" to visit the rest room.[167]

The common thread in all of these cases is that while plaintiffs argued that the exams were inaccessible *they could be made accessible with the right accommodation*. The arguments focus on whether the accommodations already offered by the defendant are adequate or whether

161. *Id.* at 852–54.

162. *Id.*

163. *See, e.g.*, Enyart v. Nat'l Conference of Bar Exam'rs, 630 F.3d 1153, 1160–65 (9th Cir. 2011); Doe v. Nat'l Bd. of Med. Exam'rs, 199 F.3d 146, 154-57 (3d Cir. 1999); Baer v. Nat'l B. of Med. Exam'rs, 392 F. Supp. 2d 42, 46–48 (D. Mass. 2005); *see also* Laura Rothstein, *Disability Law and Higher Education: A Road Map for Where We've Been and Where We May be Heading*, 63 MD. L. REV. 122, 138 (2004) ("While these test providers have been challenged on occasion for denying certain requested accommodations, there is no case law or OCR opinion indicating that such tests must be waived.").

164. *Enyart*, 630 F.3d at 1157.

165. Bonnette v. D.C. Court of Appeals, 796 F. Supp. 2d 164, 167 (D.D.C. 2011).

166. Jones v. Nat'l Conference of Bar Exam'rs, 801 F. Supp. 2d 270, 278 (D. Vt. 2011).

167. *Doe*, 199 F.3d at 150.

something else is needed. While this is a worthy debate to have, there is an underlying assumption that the exams themeselves are lawful because external accommodations can be used to make them accessible. Thus, courts have not addressed whether an exam's format and questions can make it inaccessible. Nor have they addressed how to remedy such a situation.

B. Testing the Logic Games for Total Inaccessibility

This Section explains total inaccessibility by looking at the LSAT's logic games in relation to Angelo Binno and those similarly situated, i.e., totally blind individuals.[168] To do so, this Section will compare the recommended strategies on the logic games to the modes of spatial reasoning discussed earlier. Second, it discusses why the spatial nature of the logic games makes the section inaccessible for blind individuals by applying the standards of the ADA and Section 36.309. Last, it discusses what remedy may be available under the ADA and the limits of this remedy.

1. Spatial Reasoning and the Logic Games

As previously discussed, the different types of logic games deal with the way that entities relate to each other either through their order, their placement into groups, or matching their qualities with each other. Although the entities are described linguistically examinees can imagine them existing in a physical space. The descriptions of the games and the rules act as a combination of both route and survey-based reasoning.[169] Recall that the frames of reference for route-based reasoning are specific locations in physical space[170] while survey based reasoning is based on external information that is not obtainable from direct environmental experience.[171] They are route-based in that certain locations are fixed (i.e., X will always be third in line or Y will always be selected). But the rules do not function together the same way that typical route-based directions do, with a definite start and end point where every new direction builds

168. "Total blindness" is "an inability to see anything with either eye." *Key Definitions of Statistical Terms*, AM. FOUND. FOR THE BLIND (Sept. 2008), http://www.afb.org/section.aspx?SectionID=15&DocumentID=1280. The reason this Note is focused on the totally blind is two-fold. First of all, Angelo Binno is totally blind as opposed to being legally blind but with some sight, and it is his claim that is being examined. Title III claims call for an individualized inquiry, so this Note's scope is narrowed to extend only to those whose disability manifests itself in the same way as Binno's in order to be in harmony with the law. *See* Dudley v. Hannaford Bros. Co., 333 F.3d. 299, 310 (1st. Cir. 2003). The second is that a person who is legally blind but with some sight may still have enough sight to do the necessary diagramming. The plaintiffs in *Jones* and *Eynert* presumably did well enough on their LSATs to get accepted to law school in spite of their partial blindness. *See Enyart*, 630 F.3d at 1156; *Jones*, 801 F. Supp. 2d at 272. Logic and common sense, however, tells us that if one cannot see at all that one cannot sketch diagrams to draw inferences from.

169. For a description of these types of reasoning, see discussion *supra* Section II.C.

170. *See* Picard & Pry, *supra* note 131, at 200.

171. Tinti et al., supra note 137, at 1308.

off of what came before it.[172] The logic games are more complex. The rules in a logic game are in a randomized order to confuse examinees, and some of them are dependent on whether or not a given fact exists which changes the way the entities relate to each other. The games require the examinees to step back and look at the bigger picture which is closer to survey-based reasoning. This is why sketching is so important to this section as it gives the examinee a bird's eye view of how the entities exist in space and what happens when a condition changes.[173] If spatial reasoning, specifically survey based reasoning, is an important element to solving the logic games, then one may expect totally blind examinees to struggle with them to a greater degree than their sighted counterparts. Whether or not this disproportionate struggle is in violation of the ADA is discussed in the next section.

2. Why the Logic Games Are Inaccessible

As was discussed previously, the consensus among test prep services is that drawing diagrams is the smartest strategy for the logic games due to the linguistic, spatial set-up that combines route and survey based approaches.[174] But does that alone mean that they are inaccessible? Let us now examine this possibility through the lens of Binno's claim. First, this Section briefly discusses the preliminary questions of standing in such a claim. Second, it discusses why the logic games are on the LSAT and the skills it purports to measure. This Section then goes through a sample game and explains how it could be completed using the strategies discussed in Part II. Last, it explains why these questions are not accessible to the totally blind, and that they cannot be made so using typical accommodations.

a. Preliminary Questions

As with any claim under the ADA, the first question is whether or not Binno has a disability within the meaning of the Act.[175] This is satisfied because Binno has a disability that "impairs sensory, manual, or speaking skills";[176] he is totally blind.[177] The next question is whether defendant is covered under the ADA. The ADA specifies that it applies to

172. Noordzij et al., *supra* note 124, at 325 ("Route descriptions take the addressee into the environment and give information on the position of landmarks and objects relative to the changing position of the addressee. The relative spatial information is conveyed by terms such as 'to the left' and 'to the right' . . . . Route descriptions have a sequential organization, whereby each new object is introduced in a linear fashion.").

173. *See id.* at 325 ("[S]urvey descriptions adopt a bird's-eye view and describe objects with respect to one another in terms of 'north', [sic] 'south', [sic] 'east', [sic] and 'west'. [sic] Finally, the organization of survey descriptions is often hierarchical. This hierarchical organization divides the environment into spatial areas, and then each area is described in turn.").

174. *See, e.g.*, ROBINSON & BLEMEL, *supra* note 23, at 128; discussion *supra* Subsection II.B.3.

175. *See, e.g.*, Roberts v. Royal Atl. Corp., 542 F.3d 363, 368 (2d Cir. 2008).

176. Dept. of Fair Emp't and Hous. v. Law Sch. Admission Council, Inc., 896 F. Supp. 2d 849, 867 (N.D. Cal. 2012).

177. Cullari, *supra* note 13, at 42.

persons whom offer examinations related to applications for postsecondary education.[178] This is where Binno's claim ended because the Eastern District of Michigan held that he did not have standing to sue the ABA.[179] If Binno sued the LSAC, however, then he most likely would have standing because the LSAC is the organization that administers the LSAT.[180] Further, as an integral part of the law school admission process, it is related to postsecondary education.[181] Therefore, the first two preliminary questions are satisfied.

b. The Purpose of the Logic Games

This leads to the merits. Can the exam be taken as a totally blind individual, and if not, are there any accommodations that can level the playing field for the examinee?

The first step of this inquiry is to identify the skills that the logic games purport to measure.[182] The logic games' official name is "analytical reasoning,"[183] which is facially saying that the exam is trying to measure analytical skills. Overall, the stated goal of this section is to attempt to mimic "the kinds of complex analyses that a law student performs in the course of legal problem solving."[184] To do this the exam measures examinees' ability to understand a structure of relationships and use deductive reasoning to draw logical conclusions about that structure.[185]

c. Is This Purpose Still Fulfilled when the Totally Blind Take the Exam?

Now that the stated goal of the logic games has been established, the issue becomes whether the current format of the exam best ensures that these skills are still being measured when the test taker is totally blind, "rather than reflecting the individual's impaired sensory . . . skills . . . ."[186] Subsection III.B.1. discussed how cognitive spatial ability related to how the questions are formatted and how the strategy of sketching out answers relates to this ability. Some of the methods of Kaplan, one of the popular test prep services, were discussed earlier in Subsection II.B.3. Building on this base of information this Section will look at what one of the other popular services, The Princeton Review, has to say about tackling the logic games. The Princeton Review served more than three and a half million students in 2011 and offered courses

178. 42 U.S.C. § 12189 (2012).
179. Binno v. Am. Bar. Ass'n, No. 11-12247, 2012 WL 4513617, at *5 (E.D. Mich. Sept. 30, 2012).
180. *See About the LSAT*, *supra* note 19.
181. *Id.*
182. 28 C.F.R. § 36.309(b)(1)(i) (2013) ("The examination is selected and administered so as best ensure that . . . the examination results accurately reflect the individuals aptitude or achievement level or whatever other factor the examination purports to measure . . . .").
183. *About the LSAT*, *supra* note 19.
184. *Id.*
185. *Id.*
186. 28 C.F.R. § 36.309 (b)(1)(i).

in more than a half dozen exams including the LSAT.[187] They are apparently effective, too, purporting that four out of five graduates of their program are "accepted into at least one of their top-choice schools."[188]

As stated in Part I, the Princeton Review's advice that drawing pictures for the logic games section would be helpful was an understatement.[189] Going into more detail about this section of the test, The Princeton Review says:

> Games are a visual exercise. Games test your ability to determine how various elements can be arranged in space. Therefore words don't help you; images do. Your goal will be to translate all the words that you are given in the setup and the clues, and sometimes in the questions themselves, into visual symbols. Once you've done this, you won't need to (or want to) refer to that confusing verbal mess again.[190]

They go on to explain that the writers of the LSAT develop the games "banking on the fact that most test takers will try to organize all this information in their heads" which they say is "a recipe for disaster."[191] Ultimately, they say that the "only way" to accurately answer the questions is to translate the given information into drawings.[192]

As much of an indictment as that is, it is still prudent to test its veracity by studying an example game. Here is the first example given by the Princeton Review:

> A restaurant must choose its main dinner entrée for each night of one week, beginning on Sunday and ending on Saturday. The possible entrees are beef, lamb, manicotti, pork, spaghetti, trout, and veal, each of which will be used on a different night. The following conditions must be met when determining the menu:
>
> The lamb must be served either the night before or the night after the spaghetti is served.
>
> The beef must be served either the night before or the night after either the pork or trout is served.
>
> The manicotti cannot be served the night before or the night after the veal is served.
>
> The veal must be served on Monday.[193]

This is a strict sequencing game.[194] The question is asking the examinee to place different dishes, the entities, on specific days of the week subject to certain conditions or ask about what a possible seven day

187. *About the Princeton Review,* THE PRINCETON REVIEW, https://www.princetonreview.com/about-us.aspx (last visited Aug.9, 2014).

188. *Id.* (according to an internal survey from 2009).

189. ROBINSON & BLEMEL, *supra* note 23, at 128 (the precise language being that saying that it may be useful to draw pictures on the questions is as obvious advice as saying, "it may be useful to train before running your first marathon.").

190. *Id.*

191. *Id.* at 128–29.

192. *Id.* at 129.

193. *Id.* at 132.

194. *See* KAPLAN PUBLISHING, *supra* note 25, at 79–80.

menu could look like.[195] Before an examinee even looks at the questions Princeton outlines three preliminary steps.[196] First an examinee should "diagram and inventory" which consists of drawing a chart with a section for each day of the week and listing the first letter of each entity next to the chart.[197] The next step is translating the rules into symbolic notation so that the examinee can see how they fit into the sketch.[198] For example, 'L' and 'S' are placed next to each other with a curved double-sided arrow running underneath them to indicate that they will always need to be next to each other, but the order is interchangeable.[199] A 'V' is also placed inside the chart on Monday because it will always be in that location.[200] The third step is making deductions based on the rules and writing these deductions into the chart.[201] These deductions include: putting a crossed-out 'M' into the chart on Sunday and Tuesday because the manicotti can never be the day before or after the veal which is always on Monday; putting a crossed-out 'S' and 'B' on Sunday because they will always be next to each other and therefore need at least one open space where they will be placed and Monday will always be filled; writing 'P/T' into Sunday because they are the only two left that could possible go there since every other possibility has been eliminated; and finally the deduction that the manicotti cannot be on Wednesday or Friday because there will always be two blocks of two entities that the manicotti will be left out of taking up space in the later portion of the week and no matter what combination is used to illustrate this, these blocks will always place entities on Wednesday and Friday.[202]

This is a lot of work to do before even getting to the questions, but think about how much is known now that the work is done. One space will always be taken up by the veal, the manicotti can only go in two places, and only two possible entities can possibly go into Sunday. Most importantly, examinees do not need to remember all of this during the time crunch of the exam, because *they have a handy chart to look at so they do not have to memorize this information*.

Even with extra time and a reader/braille exam it would still be exceptionally difficult to remember how all the pieces fit together especially considering that only one entity has a definitive location in the ordering based on the rules. This is why the games cannot be considered route-based in nature. The complicated rules, for example that the beef must be served either one night before or one night after one of two dishes,[203] make it extremely difficult to keep everything straight in a per-

195. ROBINSON & BLEMEL, *supra* note 23, at 132.
196. *Id.* at 133–38.
197. *Id.* at 133.
198. *Id.* at 134.
199. *Id.*
200. *Id.* at 135.
201. *Id.* at 135–38.
202. *Id.*
203. *Id.* at 132.

son's head. Route-based directions are clear and easy to follow,[204] but the rules of logic games, on the other hand, are anything but clear. The rules require examinees to take a step back and look at the big picture through survey-based spatial reasoning. The bird's eye view of the scenario that a sketch provides is invaluable.[205] The advantage that sighted test takers have over the blind is therefore two-fold. First, sighted examinees have more developed survey-based spatial reasoning than blind examinees.[206] Second, they can also draw sketches to bolster their spatial ability so they can literally see how the entities relate to each other something that blind examinees cannot do. Can we really expect blind examinees to compete at the same level as sighted examinees on these questions even with extra time?

No matter how you look at it, sighted examinees have a significant advantage on the logic games section over their blind counterparts. Advice on how to attack the logic games section consistently states that some form of sketching is necessary,[207] and given the breadth and consistency of this advice it is reasonable to assume that with few exceptions most examinees utilize this method. It is, however, not available to blind individuals. If the goal of the logic games is to test an examinee's deductive ability, which primarily manifests itself through sketching, then the logic games no longer test a blind individual's deductive capabilities. Instead it measures that individual's ability to overcome his or her inability to literally see where the deductions are made. This individual must then answer the questions in a way that is not asked of their sighted counterparts but is significantly harder to do so. This amounts to inaccessibility.

d. Auxiliary Aids

As far as auxiliary aids go even if Binno were given his choice of a reader or braille combined with a scribe to draw pictures and describe the diagrams being drawn, he would still have to keep the order straight in his head instead of seeing how everything fits together, making the exam only slightly more accessible. This is to say nothing of the fact that the entire endeavor would depend upon how effective Binno would be in working with the scribe. This would essentially test the teamwork and communications ability of Binno and his scribe as opposed to Binno's aptitude for analytical reasoning.[208]

204. *See* discussion *supra* Subsection II.C.1.

205. *See* discussion *supra* Subsection II.C.2.

206. *Id.*

207. *See supra* note 25 and accompanying text.

208. There is one potential auxiliary aid that is not offered by the LSAC but may make the logic games accessible without making any changes to the test itself. This potential auxiliary aid is called a swell pad. A swell pad is a rubberized drawing pad that allows for raised lines on the paper on top of it. Mark Preddy, *Manual Methods of Making 2D Tactile Pictures*, SCIENCE ACCESS PROJECT (May 20, 1996 12:49), http://dots.physics.orst.edu/tactile/node6.html. The paper, known as swell paper, are thin sheets of special mylar polyester film that when pressed upon with a stylus with a rounded tip on the pad results with a kind of pop-up sketch. *Id.* While the image's height is marginal, "this pad can be a very useful means of instant graphic communication with blind people." *Id.* This solution is even

3. Changing the Manner in which the Logic Games are Given

While it is possible to develop an adequate auxiliary aid that makes the logic games accessible to blind individuals, right now there is none. This Section discusses what remedies a court could grant for an exam that is totally inaccessible.[209] As discussed previously, the remedy for an inaccessible examination is normally to provide an accommodation like extra time, breaks between sections, or provide an auxiliary aid. But total inaccessibility is not a normal situation and a different remedy may be called for such as designing an alternative version of the analytical reasoning section that still tests blind examinees' deductive reasoning but in an accessible manner. First, this Section explains why this remedy is appropriate under the ADA and Section 36.309. Second, it discusses three potential criticisms of this remedy.

Although this is a remedy that has never been ordered, it falls within the confines of the ADA and Section 36.309. The ADA says that if an examination is not offered in a manner accessible to persons with disabilities, then there needs to be "alternative accessible arrangements for such individuals."[210] As part of its remedies section Section 36.309 states that required modifications to inaccessible exams include "adaptation of the manner in which the examination is given."[211] Admittedly, courts have never interpreted this to mean that the questions themselves must change.[212] As discussed earlier this remedy has been applied to change the way tests are administered, such as providing rest breaks[213] or man-

more attractive considering that there is evidence that blind people have the ability to draw. Martin Kurze, *TDraw: A Computer-based Tactile Drawing Tool for Blind People*, 2 ANN. ACM CONFERENCE ON ASSISTIVE TECH. 131 (1996); Daniel Zalewski, *Even Blind People Can Draw*, MAGAZINE, N.Y. TIMES, (Dec. 15, 2002), http://www.nytimes.com/2002/12/15/magazine/15EVEN.html; John M. Kennedy, *Teach: How the Blind Draw*, ART BEYOND SIGHT, http://www.artbeyondsight.org/teach/how-blind-draw.shtml (last visited Aug 9, 2014). In fact, the second experiment discussed in Part II appears to have utilized swell pads when asking blind individuals to draw the path that they had walked, even noting that the participants were familiar with this tool. Tinti et al., *supra* note 137, at 1312 n.2. The pad would allow a blind examinee to sketch diagrams onto the pad and then feel the diagram as a point of reference for the information the same way that sighted individuals look at their sketches.

While swell pads are a promising auxiliary aid that might make the logic games accessible to blind individuals, this Note is not prepared to say that they are in fact the solution. This appears to be the first time that use of a swell pad as an auxiliary aid on the logic games has been suggested. There does not appear to be any research into whether or not this would be an appropriate accommodation. Thus, their effectiveness in making the logic games accessible is unknown. Perhaps this can work as a solution avoiding the more drastic measure of developing a new format of the exam for blind examinees that is discussed in the next section. But perhaps not.

209. Even if swell pads are the solution in this particular case, there may still be situations in the future where an exam truly is totally inaccessible. As such, this Note finds it appropriate to discuss what should be done in such a situation.

210. 42 U.S.C. § 12189 (2012).

211. 28 C.F.R. § 36.309(c)(2) (2013).

212. This, however, is understandable considering that courts have never had to address a facial challenge to the way questions on an exam are asked.

213. *See, e.g.*, McInerney v. Rensselaer Polytechnic Inst., 688 F. Supp. 2d 117, 125 (N.D.N.Y.2010) (holding that if plaintiff was precluded from requesting or receiving frequent breaks during an exam that it would be a reasonable basis to conclude that defendant had failed to provide reasonable accommodations).

dating the examinees be allowed to use assistive reading tools like screen assistive software like Zoomtext[214] or JAWS.[215]

This does not mean, however, that courts cannot mandate this remedy under the ADA, only that they have not done so yet. If typical accommodations and auxiliary aids cannot make an exam accessible, then changing the format of the questions is the only way to best ensure that the exam "accurately reflect[s] the individual's aptitude or achievement level . . . rather than reflecting the individual's impaired sensory . . . skills . . . ."[216] Furthermore, Section 36.309 contemplates that there will be separate examinations independently designed for individuals with disabilities.[217]

Reading the statute to reach this conclusion essentially goes as follows. In evaluating an exam we should focus on the skills and knowledge that it purports to measure. The questions themselves can be viewed as the "manner" in which these skills are tested. If the questions are changed while the skills they measure remains the same, then this is in effect changing the manner in which the examination is given. This remedy is likely to encounter a few lines of criticism. The first is that this remedy goes further than what is contemplated by the regulations and is not faithful to what they require. Nowhere do the statute or the regulations explicitly say that the format of a test, or its questions, need to change to make the exam accessible. Concluding that this remedy falls within the purview of the law requires too broad a reading of the phrase "manner in which the exam is given."[218]

First, this criticism ignores that the regulations contemplate that there will be alternative tests designed for the disabled even if they do not explicitly provide for such an order.[219] More importantly, the ADA is a remedial statute[220] and remedial statutes are to be interpreted broadly to ensure its purpose is fulfilled.[221] Because the purpose of the ADA's examination provision cannot be fulfilled though conventional accommodations, accessibility can only be effectuated by reformatting totally inaccessible exams. Furthermore, the regulations mandate that covered examinations be "selected," as well as administered, to best ensure the goals of the ADA.[222] This implies that if an examiner has selected an in-

214. *See, e.g.*, Jones v. Nat'l Conference of Bar Examiners, 801 F. Supp. 2d 270, 278 (D.Vt. 2011).

215. *See, e.g.*, Bonnette v. Dist. of Columbia Court of Appeals, 796 F. Supp. 2d 164, 167 (D.D.C. 2011).

216. 28 C.F.R. § 36.309(b)(1)(i).

217. 28 C.F.R. § 36.309(b)(1)(ii).

218. 28 C.F.R. § 36.309(b)(2).

219. 28 C.F.R. § 36.309(b)(1)(ii).

220. *See* 42 U.S.C. § 12101(b)(1) (2012) ("It is the purpose of this chapter to provide a clear and comprehensive national mandate for the elimination of discrimination against individuals with disabilities."); *see also*, PGA Tour Inc. v. Martin, 532 U.S. 661, 674 (2001) ("Congress enacted the ADA in 1990 to remedy widespread discrimination against disabled individuals.").

221. Tcherepnin v. Knight, 389 U.S. 332, 336 (1967) ("[W]e are guided by the familiar canon of statutory construction that remedial legislation should be construed broadly to effectuate its purposes.").

222. 28 C.F.R. § 36.309(1)(i).

accessible exam, an accessible one must be selected in its stead to remedy the inaccessibility. As the Third Circuit put it, "[Section 36.309] mandates changes to examinations . . . so that disabled people who are disadvantaged by certain features of standardized examinations may take the examination without those features that disadvantage them."[223]

A likely source of criticism of this remedy is that changing the format of the logic games "fundamentally alters" the examination and is therefore not required under the ADA.[224] This, however, ignores that Section 36.309's "fundamentally alter provision" is worded differently than similar provisions in other regulations under the ADA. What Section 36.309 says specifically is that an auxiliary aid need not be granted if it would "fundamentally alter *the measurement of the skills or knowledge the examination is intended to test*."[225] This language is deliberate. The original language of the rule tested whether the auxiliary aid would "fundamentally alter the examination."[226] It was changed after a suggestion from a commenter that the rule "more accurately reflect the function affected" the Department of Justice adopted the language of the final rule.[227] Furthermore, this remedy is not an accommodation that "would prevent [an examinee's] scores from accurately evaluating the skills intended to be measured by the test" and would therefore be lawful to deny.[228] Just the opposite, it seeks to *ensure* that the skills are accurately evaluated. Therefore, it does not matter that that the makeup of the exam changes, so long as the knowledge being tested remains the same.

The last criticism of this remedy is that it would constitute an "undue burden" for the creators of a totally inaccessible exam.[229] Whether or not this is a valid defense may depend on the alternative version of the section that is considered. As the Northern District of California pointed out this provision only appears in the auxiliary aid provision of Section 36.309.[230] According to the court, these sections were deliberately excluded from the remainder of the regulations, namely Section 36.309(b)(1).[231] Therefore, the court reasoned the requirement ensuring an accessible exam "is imposed regardless of the burden it causes the test provider."[232]

223. Doe v. Nat'l Bd. Of Med. Exam'rs, 199 F.3d 146, 156 (3d Cir. 1999).

224. Generally, accommodations need not be granted under the ADA if they fundamentally alter the nature of the service, program or activity offered. *See, e.g.*, Powell v. Nat'l Bd. Of Med. Exam'rs, 364 F.3d 79, 88 (2d Cir. 2004).

225. 28 C.F.R. § 36.309(b)(3) (emphasis added).

226. Nondiscrimination on the Basis of Disability by Public Accommodations and in Commercial Facilities, 56 Fed. Reg. 35544-01(codified at 28 C.F.R. § 36.309).

227. *Id.*

228. Falchenberg v. N. Y. State Dept. of Educ., 338 F. App'x 11, 13 (2d, Cir. 2009).

229. 28 C.F.R. § 36.309(b)(3).

230. Briemhorst v. Educ. Testing Serv., No. C-99-CV-3387, 2000 WL 34510621, at *5 (N.D. Cal., Mar. 27, 2000) (citing 28 C.F.R. § 36.309(b)(3)). This is also true of the fundamentally altered language, so the same logic may also apply to that provision as well. *See id.*

231. *Id.* (citing 28 C.F.R. Pt. 36, App. B at 651).

232. *Id.*

There is good reason to believe that an alternative version of the analytical reasoning section would not be considered an auxiliary aid. In relation to blind individuals the ADA defines auxiliary aids and services as "qualified readers, taped texts, or other effective methods of making visually delivered materials available to individuals with visual impairments."[233] Section 36.309's definition is largely the same, only adding Braille or large print exams.[234] Alternative formats for an exam are not listed. Of course, these lists are not exhaustive but show that auxiliary aids are generally services or devices that allow visual materials to be read or understood by the visually impaired, not alternative versions of exams that adequately assess their skills. Furthermore unlike auxiliary aids, an alternative version of the exam would not be a way to make visual information easier to read. Instead, it would allow the visually impaired to avoid being forced into a method of answering the questions that involves visualizing the information. It is more natural to consider an alternative section as being "selected" over the inaccessible version, and therefore not subject to the undue burden requirement. This version may be distributed in braille and thus considered an auxiliary aid, but this is not necessarily going to be the case. Some examinees may prefer a reader. In any case, it is not the alternative section itself that would constitute the auxiliary aid but the conversion of this section to braille.

Of course, it is possible that a court would view an alternate version of the test as an auxiliary aid. After all, the alternate version would be an external accommodation designed so that what was a visual mode of solving the questions becomes accessible to the visually impaired. It might not be directly comparable to other auxiliary aids listed and previously used, but this remedy is not exactly comparable to anything that came before it in the first place. Also, courts have had a tendency to read the undue burden defense into sections of the ADA where it was not expressly listed.[235] So there is still a possibility that courts would allow test administers to bring an undue burden defense. While requiring a different format is "arguabl[y] much more burdensome" than providing other accommodations,[236] this defense is difficult to address at this time because what precisely constitutes an undue burden is difficult to ascertain.[237] Undue burden means significant expense or difficulty.[238] It is applied on a case-by-case basis and is measured as the financial impact on the claiming entity as a whole.[239] At this time it is unknown how much it

233. 42 U.S.C. § 12103(1)(B) (2012).

234. 28 C.F.R. § 36.309(b)(3).

235. Armen H. Merjian, *Bad Decisions Make Bad Decisions:* Davis*,* Arline*, and Improper Application of the Undue Financial Burden Defense Under the Rehabilitation Act and the Americans with Disabilities Act*, 65 BROOK. L. REV. 105, 152–64 (1999).

236. LAURA ROTHSTEIN & JULIA IRZYK, DISABILITIES AND THE LAW § 3:6 (4th ed. 2013).

237. NAT'L ASS'N OF THE DEAF LAW AND ADVOCACY CTR., *Attorneys, Deaf Clients, and the Americans with Disabilities Act* 47, 48 (2004), http://www.wvdhhr.org/wvcdhh/directories/07toc/attorneys.pdf.

238. 28 C.F.R. 36.104 (2013).

239. NAT'L ASS'N OF THE DEAF LAW AND ADVOCACY CTR., *supra* note 237, at 48.

would cost to research, develop, and administer an alternative version of the analytical reasoning section. Moreover, the individualized, case-by-case nature of the defense suggests it would be imprudent to try to articulate the standard used by courts where they never say *why* the costs associated with an accommodation constitute an undue burden.[240] Because of these unknown factors, combined with the unclear standards, this Note cannot confidently predict the result where such a defense is claimed. Courts may hold that the expense of creating a new section would not constitute an undue burden in part because although it might be expensive to develop a new section for a single examinee, once developed, this reformatted section can be used repeatedly to accommodate individuals with similar disabilities.

IV. RECOMMENDATION

Although the courts have not yet had to address a situation in which an examination is totally inaccessible, Angelo Binno's claim may not exist in isolation. The logic games section of the LSAT represents but one scenario of total inaccessibility. There may be more. Courts should be prepared to address the merits of such claims. Fortunately, the regulations promulgated in Section 36.309 lend themselves to a *prima facie* framework. This framework should therefore serve as the model that courts use when addressing issues of total inaccessibility. There are four reasons for this. First, as previously mentioned, Section 36.309 strongly implies usage of a *prima facie* test by establishing criteria for courts to use in determining accessibility and then listing two affirmative defenses once plaintiffs have sufficiently pleaded their case.[241] Second, the *prima facie* test is already used frequently in discrimination cases under remedial statutes.[242] Third, it would create predictable and consistent standards for courts to apply when making this determination. Finally, the very existence of this standard would put exam administers on notice that total inaccessibility is possible and encourage preemptive action on their part to ensure that their exams are always accessible.

240. *See, e.g.*, Bonnette v. Dist. of Columbia Court of Appeals, 796 F. Supp. 2d 164, 186 (D.C.C. 2011) (holding that $5000 to administer the Multi State Bar Exam with JAWS is not an undue burden because the National Conference of Bar Examiners' operating budget exceeded $12 million dollars but not explaining why that is so). This lack of clear reasoning extends beyond examinations and includes the general public accommodations provisions of Title III. For instance, the District Court of Washington D.C. denied a motion for summary judgment, holding that there was a genuine issue of material fact as to whether installation of rear window captioning screens in movie theaters would cost over one million dollars per defendant, or $300,000 each. The court never explained why a cost of over one million would presumably be an undue burden but a cost of $300,000 presumably would not. Ball v. AMC Entertainment, Inc., 246 F. Supp. 2d 17, 26 (D.C.C. 2003).

241. While these defenses are technically only applicable to auxiliary aids, courts have had a tendency to read these defenses into sections of regulations where they are not listed. Plus an alternative version of an exam may very well be considered an auxiliary aid. *See* discussion *infra* Subsection III.B.3.

242. Michael J. Hays, *That Pernicious Pop-Up, the Prima Facia* Case, 39 SUFFOLK U. L. REV. 343, 343 (2006). *See, e.g.*, McDonnell Douglas Corp. v. Green, 411 U.S. 792 (1973).

This Part first explains what a *prima facie* standard is. Second, it explains how the regulations lend itself to a *prima facie* framework and applies this framework to Angelo Binno's case against the logic games. Last, this Part suggests that the LSAC not wait for a court battle, but independently ensure their exam is accessible.

A. Prima Facie*: What, When, and Where*

Making a *prima facie* case is a standard of proof that courts use in civil cases.[243] It can essentially be used in two senses, one stronger and one weaker.[244] The weaker sense is understood as meaning the plaintiff has merely introduced sufficient evidence to survive a directed verdict.[245] The stronger sense means that the evidence is so strong that no reasonable person could fail to find for the plaintiff thus shifting the burden of production onto the defendant to mount a credible defense.[246] Because claiming that an exam is totally inaccessible would have drastic implications for the test's administrator, the latter, higher standard is advocated for here.

A *prima facie* case works in the following way: if a claimant establishes that a certain set of predetermined facts have occurred, then the law treats the situation as if a certain conclusion has been reached.[247] In formal logic terms this equates to if A and B and C are true then D must be true. Once the plaintiff has successfully made their case the burden of proof and/or the burden of production shifts onto the defendant to rebut the plaintiff's case.[248]

1. McDonnell Douglas Corp. v. Green

It will be useful to see how this framework functions in the real world. One of the most well-known cases establishing how the *prima facie* framework is applied in racial discrimination cases is *McDonnell Douglas Corp. v. Green*.[249] There, the Supreme Court held that one can make a showing of racial discrimination if "(i) that he belongs to a racial minority; (ii) that he applied for and was qualified for a job for which the employer was seeking applicants; (iii) that . . . he was rejected; and (iv) that, after his rejection, the position remained open, and the employer continued to seek applicants from persons of complainant's qualifications."[250] This legal presumption then shifts the burden of production to present evidence explaining why racial motivation did not factor into the

243. John J. Barceló III, *Burden of Proof, Prima Facie Case and Presumption in WTO Dispute Settlement*, 42 CORNELL INT'L L. J. 23, 31 (2009).
244. *Id.*
245. *Id.*
246. *Id.*
247. *Id.* at 32.
248. *Id.*
249. 411 U.S. 792 (1973).
250. *Id.* at 802.

employer's decision.[251] If the employer succeeds in credibly meeting this burden, then the burden of proving racial discrimination remains with the plaintiff.[252]

This framework can easily be applied to litigation over total inaccessibility. First, the plaintiff would have the burden of production to establish that he has a legally recognized disability under the ADA, that the exam is covered by the ADA, and the burden of persuasion that the exam is totally inaccessible. Once this burden has been met the burden shifts to the test administer to prove that the new format constitutes an auxiliary aid and that it fundamentally alters the skills being tested or would be an undue burden. This framework is discussed in more detail in the next section.

B. A Prima Facie *Test Based on the Regulations.*

Having a clear framework establishing who needs to prove what before declaring an entire section of an exam in violation of the ADA is not just desirable as a general matter of policy, it is supported by the federal regulations. The "best ensure" standard essentially already establishes a *prima facie* framework for exam accessibility.[253]

Step one of the framework is to ask whether or not the person is disabled. This may feel like an obvious question to ask but that does not make it any less essential. Section 36.309 specifically says that it applies to individuals with a disability that "impairs sensory, manual, or speaking skills."[254] Thus, this threshold requirement must be met before anything else. This is satisfied because Binno is totally blind.[255]

The second step of the framework is asking whether or not the exam is being offered by the defendant and whether the exam relates to "applications, licensing, certification, or credentialing for secondary or post–secondary education, professional, or trade purposes . . . ."[256] This question is satisfied because the LSAT is an "integral part of the law school admission process . . . ."[257] Thus, it is related to postsecondary education.

The third step looks at what skill the exam purports to measure and then looks at whether this skill is still being measured appropriately considering the disability. This part is guided by §36.309(b)(1)(i) which says that exams must be administered so that when a person with a disability takes them they "best ensure that . . . the examination results accurately reflect the individual's aptitude or achievement level or whatever other factor the examination purports to measure, rather than reflecting the

251. *Id.*
252. Barceló III, *supra* note 243, at 32.
253. *See* 28 C.F.R. § 36.309 (2013).
254. 28 C.F.R. § 36.309(b)(1)(i).
255. *See* Cullari, *supra* note 13, at 42.
256. 42 U.S.C. § 12189 (2012).
257. *About the LSAT*, *supra* note 19.

individual's impaired sensory, manual, or speaking skills . . . ."[258] An exception is made where those impaired skills are precisely what the exam purports to measure.[259]

When applying this step to the LSAT there are two questions that need to be answered. First, what is the skill or knowledge that the logic games purport to measure? The logic games section is officially named "analytical reasoning,"[260] so the surface answer is analytical skills. Overall, the stated goal of this section is to attempt to mimic "the kinds of complex analyses that a law student performs in the course of legal problem solving."[261] To do this the exam measures the test taker's ability to understand a structure of relationships and use deductive reasoning to draw logical conclusions about that structure.[262] Essentially this amounts to measuring an examinee's deductive reasoning.

Second, are the logic games still measuring these skills when the examinee is totally blind or are they measuring the examinee's ability to overcome his or her blindness when taking the exam? This question is addressed in detail in Part III of this Note. This Note argues that the answer is no because sketching diagrams is so fundamental to the process of answering the logic games questions that it puts totally blind examinees at a disadvantage relative to their sighted counterparts even when given additional time and other typical accommodations.[263]

The fourth step looks at possible accommodations that can be provided currently. This would not just include the accommodations that are currently offered by the testing agency but all possible accommodations that can be reasonably conceived to give the test takers a level playing field. As long as the accommodation or auxiliary aid does not "fundamentally alter the measurement of the skills or knowledge the examination is intended to test or would result in an undue burden,"[264] it will be considered a valid accommodation and the inquiry ends here as the test is not totally inaccessible.[265] As discussed previously, however, there are currently no auxiliary aids offered nor are there any with the proven potential to specifically assist totally blind examinees on the logic games.

Once these four steps have been satisfied, the plaintiff has met their burden. The exam is not presumed to violate the ADA as being inaccessible and needs to be modified so that the manner in which the exam is given is no longer inaccessible.[266] At this point the burden shifts to the exam administers to present their defenses.

258. 28 C.F.R. § 36.309(b)(1)(i).
259. 28 C.F.R. § 36.309(b)(1)(i)(5).
260. *About the LSAT*, *supra* note 19.
261. *Id.*
262. *Id.*
263. *See* discussion *supra* Subsection III.B.2.iii.
264. 28 C.F.R. § 36.309(b)(3).
265. *See* 28 C.F.R. § 36.309(b)(2).
266. *See* discussion *supra* Subsection III.B.3.

At step five the court needs to make a determination as to whether an alternative version of an exam constitutes an auxiliary aid. If not, then the inquiry likely ends there because there are technically no defenses to the selection of an inaccessible exam.[267] In light of this the burden of persuasion that the alternative section *is* an auxiliary aid falls on the defense because they are the ones interested in proving this. For reasons discussed previously it is unlikely that a court will determine that the alternative version of the analytical reasoning section will constitute an auxiliary aid.

If, however, the court finds otherwise or wants to read the undue burden defense into the regulations not dealing with auxiliary aids, then in step six the agency now has the burden to demonstrate that developing this section constitutes an undue burden or fundamentally alters the skill measured by the exam.[268] As discussed previously the LSAC is likely to fail in carrying this burden as well. If the defendant fails, then the court should order that the testing agency develop a new section of the exam that is accessible for the disabled individual, justified by the reasoning stated in Part III.

C. Test Administers Should Not Wait for a Court Order to Act

This Note suggests to the LSAC and other test developers not to wait for a court order to develop an accessible alternative to their examinations. When someone accuses you of discrimination the reflex may be to say that you do not discriminate and fight the claim. This is not always the appropriate reaction. Developing a new section of an exam or researching whether an auxiliary aid will make the exam accessible may have its costs, but it will still be cheaper than bearing the costs of litigation, losing, and having to bear these costs anyway.

Furthermore, it is the right thing to do. The purpose of the ADA is to ensure that individuals with disabilities are able to fully participate in all aspects of society without discrimination.[269] As currently formatted, the LSAT prevents exactly that for the totally blind. It is inaccessible. It discriminates. As Nicolas Pomaro, Paul Rink, and Binno's lawyer, Richard Bernstein have demonstrated total blindness is not a bar to having a successful career as a lawyer.[270] The LSAT, however, serves as a potential bar to the totally blind from becoming lawyers in the first place. This needs to be rectified and the LSAC should not wait until a court orders them to do so.[271]

267. *See* discussion *supra* Subsection III.B.3.

268. *See* discussion *supra* Subsection III.B.3.

269. *See* 42 U.S.C. § 12101(a)(1) (2012).

270. *See* discussion *supra* Part I.

271. The American Bar Association should also consider allowing law schools to grant exemptions from their "valid and reliable" test requirement in their standards for the admission of law students. *See* AM. BAR ASS'N, *supra* note 18, at 36 (referencing Standard 503). This way, law schools can waive the LSAT for totally blind applicants if they choose to do so. This had occurred as recently as a year before the "valid and reliable" standard was put in place in 1997 when Northwestern waived the

V. CONCLUSION

Total inaccessibility may be an issue that has not yet been addressed by the courts, but that does not mean that it is not an issue. The logic games section of the LSAT represents such a scenario. Although the ABA trusts the LSAT as a reliable indicator of the talent that potential lawyers possess, it is not necessarily a perfect measuring tool. Judge Pomaro, Paul Rink, and Richard Bernstein are all successful, totally blind attorneys who did not have to take the LSAT because they went to law school before the LSAT was a *de facto* requirement.

Angelo Binno's resume indicates that he is an otherwise qualified student who has been locked out of law schools because of low scores on an exam that is designed in a way that makes it more difficult for him than similarly situated sighted test takers. The LSAC did not likely design its exam to discriminate against the blind, but it discriminates nonetheless. To prove his claim in court Binno should have clear standards to apply based on the laws and regulations that already exist. This Note has proposed such a standard and applied it to the LSAT. This Note has taken into consideration the history and intent of the ADA as well as the intent of the LSAT in developing the logic games section. It has also explained how the cognitive abilities of the visually disabled differ from the sighted in a way that makes the logic games inaccessible to the totally blind.

Antidiscrimination laws are still a relatively new phenomenon. At twenty-four years old, the ADA is among the newest of those enacted.[272] As new facts come to light, standards and practices need to be adjusted to best ensure that society is as inclusive as possible. An inclusive society does not create barriers to entering a profession where a disabled individual is otherwise qualified to get the job done. The LSAC needs to adjust their test so that it is not such a barrier. Other exams that have total accessibility problems should adjust their exams accordingly as well. Where test administrators are unwilling to do so courts should apply the total inaccessibility test described above and then order the test administrator develop a new, alternative section for those whom it is inaccessible to. This may not itself guarantee inclusiveness across all society, but it is a step in that direction.

LSAT for Richard Bernstein in 1996. *Cullari*, *supra* note 13, at 42. Even if the LSAT does not change, law schools should be able to consider accepting a qualified blind applicant without worrying about a low LSAT hurting their ranking in the U.S. News and World Report, which uses medial LSAT scores of incoming classes as part of their ranking criteria. *See* Sam Flanigan & Robert Morse, *Methodology: 2015 Best Law School Rankings*, U.S. NEWS AND WORLD REPORT (Mar. 10, 2014), http://www.usnews.com/education/best-graduate-schools/top-law-schools/articles/2013/03/11/methodology-best-law-schools-rankings.

272. *See* Americans with Disabilities Act of 1990, Pub. L. No. 101-136, 104 Stat. 327.