

## Article

# Utilizing External-Knowledge in Means-Ends Analysis: A Comparative Study on Taiwanese and U.S. Cases Regarding Interdisciplinary Approaches to Constitutional Reasoning

Wen-Yu Chia \*

### ABSTRACT

*Means-Ends Analysis (MEA) is an essential stage of human rights cases in constitutional review. Traditionally, this analysis is conducted under formalistic notion; nevertheless, under the influence of legal realism movement, the U.S. Supreme Court had adopted interdisciplinary approaches in many cases. In recent years, the Taiwanese Constitutional Court (TCC) also shows an interest in interdisciplinary approaches occasionally. This essay will focus on some landmark human rights cases under these two jurisdictions. By comparative research, some common strengths as well as weaknesses of interdisciplinary approaches of MEA in constitutional reasoning may be revealed at a fundamental level of constitutional law that are beyond the boundaries of legal traditions (i.e. common law v. civil law). Those strengths and weaknesses may address the essence of interdisciplinary approaches to (constitutional) law as a distinctive legal methodology.*

**Keywords:** *Constitutional Law, Taiwan Constitutional Court, Interdisciplinary Approaches, Legal Realism, Proportionality Test*

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\* Assistant Professor, Graduate Institute of Health and Biotechnology Law, Taipei Medical University. S.J.D., Duke University Law School. Contact: cwy2017@tmu.edu.tw. This essay is revised from the author's (unpublished) doctoral dissertation chapters.

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## I. INTRODUCTION

Comparative constitutional law has been a prominent approach in the academic world, which primarily focuses on either doctrinal or contextual aspect: the former cares about the conceptual comparison and its proper application to cases; the latter emphasizes on contextual (e.g., historical, cultural, and socio-economic) factors and its interactions with the constitution as an institution.<sup>1</sup> By contrast, comparative studies regarding approaches and methodologies of constitutional reasoning are relatively uncommon.<sup>2</sup>

While U.S. constitutional cases and theories have a significant influence to the Taiwanese Constitutional Court (TCC) and the Taiwanese academic community, this influence is primarily at the doctrinal level. For instance, due process, free speech, and scrutiny theory in equal protection are the most significant examples;<sup>3</sup> and separation of powers cases such as “the political question doctrine” in *J.Y. Interpretation No. 328*<sup>4</sup> and unitary executive theory in *J.Y. Interpretation No. 613*, in which the constitutionality of the nomination and appointment procedure of the National Communication Commission were disputed.<sup>5</sup>

By contrast, U.S. legal realism and the interdisciplinary approaches to constitutional reasoning appear to be much less welcome than their doctrinal counterparts in the TCC. Under the influence of legal realism movement, one of the distinctive features of the U.S. jurisprudence is its relatively open attitude toward interdisciplinary approaches, and constitutional law is no exception.<sup>6</sup> While interdisciplinary approaches

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1. See, e.g., WEN-CHEN CHANG ET AL., CONSTITUTIONALISM IN ASIA: CASES AND MATERIALS (2014); COMPARATIVE CONSTITUTIONAL LAW IN ASIA (Tom Ginsburg & Rosalind Dixon eds., 2014); Cheryl Saunders, *Towards a Global Constitutional Gene Pool*, 4 NTU L. REV. 1 (2009); VICKI JACKSON & MARK TUSHNET, COMPARATIVE CONSTITUTIONAL LAW (2d ed. 2006).

2. See, e.g., HUANG SHU-PENG (黃舒芃), *Xianfazhong de Shiyixue yu Keji Zhenghe: Lun Taiwan Xianfaxue Jishou Dianfan de Bianqian* (憲法中的釋義學與科際整合—論台灣憲法學繼受典範的變遷) [*Dogmatism and Interdisciplinary Approach in Constitution: On the Paradigm Shift of Taiwanese Inheritance of Foreign Jurisprudence*], in BIANQIAN SHEHUIZHONG DE FAXUE FANGFA (變遷社會中的法學方法) [LEGAL METHODOLOGY IN A CHANGING SOCIETY] 227 (2009).

3. *Id.* at 231-33; David S. Law & Wen-Chen Chang, *The Limits of Global Judicial Dialogue*, 86 WASH. L. REV. 523, 560 (2011).

4. Law & Chang, *supra* note 3.

5. The U.S. Supreme Court case *Buckley v. Valeo*, 424 U.S. 1 (1976) was cited and debated between separate opinions.

6. See, e.g., JOHN MONAHAN & LAURENS WALKER, SOCIAL SCIENCE IN LAW: CASES AND MATERIALS 2-103, 188-342 (7th ed. 2009); HUANG SHU-PENG (黃舒芃), *Shehui Kexue Yanjiu de Minzhu Yihan: Meiguo Falu Weishilun de Minzhuguan jiqi Qishi* (社會科學研究的民主意涵：美國法律唯實論的民主觀及其啓示) [*The Democratic Essence of Social Science Research: The Inspiration from American Legal Realism's Idea of Democracy*], in BIANQIAN SHEHUIZHONG DE

are rapidly growing in academia as a new way for academic research and legal education programs design,<sup>7</sup> their roles in constitutional decision making and reasoning in the TCC are rather ambiguous. Nonetheless, there is a gradual growth in the TCC of this “exotic” methodology of constitutional reasoning,<sup>8</sup> and doubts and criticisms have been raised accordingly from different perspectives.<sup>9</sup>

This essay will focus on some landmark human rights cases that involved means-ends analysis (MEA) and interdisciplinary approaches in both countries’ highest courts regarding constitutional issues. By comparison, some common strengths as well as weaknesses of interdisciplinary approaches of MEA in constitutional reasoning may be revealed at a fundamental level of constitutional law. **Part I.** illustrates the definition of terms, the criteria of case selection, and the structure of this comparative study. Since the Taiwanese background and experience may be unfamiliar to most of the readers, this essay will inform readers properly in-depth with necessary information in this section as well. **Part II.** presents the role of interdisciplinary approaches in the assessment of *the excessiveness of the means* in Taiwanese and U.S. cases; and **Part III.** presents the role of interdisciplinary approaches in the evaluation of *legitimate ends* in Taiwanese cases. The practice of the U.S. constitutional law will be compared with in **Part IV.** General observations and final comments are made in **Part V.**

## II. DEFINING THE SCOPE OF RESEARCH

Interdisciplinary approaches, by definition, involve knowledge that is *not* presumed to be *within* the discipline of law--thus *external* to law. Accordingly, external-knowledge is defined by the *nature of the information* involved instead of the *provider* (e.g. expert witnesses) of the information. External-knowledge refers to rational and systematic understanding of subjects other than law. Admittedly, the concept of external-knowledge covers a wide range of information, which may be

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FAXUE FANGFA (變遷社會中的法學方法) [LEGAL METHODOLOGY IN A CHANGING SOCIETY], *supra* note 2, at 173, 174-81; WOUTER DE BEEN, LEGAL REALISM REGAINED: SAVING REALISM FROM CRITICAL ACCLAIM 2-8, 39-55 (2008); Joseph William Singer, *Legal Realism Now*, 76 CALIF. L. REV. 465, 503 (1988).

7. Wang Tay-Sheng (王泰升), *Sige Shidai Xingsu Ercheng de Zhanho Taiwan Faxue* (四個世代形塑而成的戰後台灣法學) [*Jurisprudence of Post-war Taiwan Shaped by Four Generations*], 40 TAIDA FAXUE LUNCONG (臺大法學論叢) [NTU L.J.] 1367, 1407-08 (2011); HUANG, *supra* note 2, at 232.

8. HUANG, *supra* note 2, at 231-37.

9. *Id.* at 234-38. Professor Huang is extremely cautious to this growth in general; other criticisms are built on a case-by-case basis (please see the case study sections).

partially covered by terms including empirical data, legislative facts . . . etc. in other literature. For example, social science research is one of the typical kinds of knowledge that interdisciplinary approaches utilize, and thus be criticized about.<sup>10</sup> The knowledge utilized by interdisciplinary approaches will be noted as “external-knowledge;” but this essay respects and follows the terms used in other literature when making references to them, even in most cases those terms are interchangeable with external-knowledge.

#### A. *External-Knowledge as Substance in the Reasoning*

External-knowledge can play two different roles in constitutional reasoning. It may serve as *substance* when it is an indispensable part of the reasoning (i.e., a decision would be flawed without it and the associated reasoning would fail to demonstrate the rationale behind the decision). By contrast, when external-knowledge serves as *decoration*, it is cited simply to make reasoning “look good” (i.e., the reasoning itself is justifiable without reference to the cited external-knowledge). Decoration is a concept similar but not identical to the common law concept *dicta*. *Dicta* is traditionally considered “everything other than the statements of the facts and the statement of the holding.”<sup>11</sup> Although the standard for determining *dicta* is vague,<sup>12</sup> it signifies the idea that not every word in a judicial decision bears the same weight and effect. Nevertheless, decoration may carry more weight to constitutional reasoning than *dicta*. For example, a decoration may be a “supportive” statement providing certain additional but unnecessary justification that supports a decision: in this scenario, the supportive statement is neither *dicta* nor *substance* (as defined in this essay).

The concept of *dicta* can be found in Taiwanese constitutional theory. However, its scope has yet to be fully explored. As background, an interpretation rendered by the TCC consists of two to three parts: Holding, Reasoning, and sometimes separate opinions. One special type of *dicta* in

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10. The idea “social science research” is not clearly defined, and some information adopted in constitutional reasoning may be deemed as something other than social science research and referred as “raw data”, “numerical data” or “empirical study”. The distinctions between those concepts are a matter of philosophy of (social) sciences. Since the interest of this thesis mainly focuses on interaction between the *external*- and *internal*- knowledge in constitutional reasoning, and social science research, raw data, numerical data, or empirical study are all *external* to traditional legal (*internal*) materials, it is not necessary to define and exclude information other than social science research from this essay (in other words, they all belong to the idea of external-knowledge).

11. FREDERICK SCHAUER, THINKING LIKE A LAWYER: A NEW INTRODUCTION TO LEGAL REASONING 55 (2009).

12. *Id.* at 56-57.

the TCC is “judicial censure,” which occurs in Holding or Reasoning. Generally, it is a suggestion (or an instruction) for amending a disputed provision in the future; however, it does not impose any legal obligation for legislative compliance.<sup>13</sup> Also, it is not clear if judicial censure is the only kind of *dicta* in the TCC since the scope of *dicta* is not clearly defined and discussed in this context. For this reason, the selection of TCC cases based on the distinction between *substance* and *decoration* will yield greater accuracy within the context of this essay.

This essay selects cases where external-knowledge provided, or could have provided, essential supports for justifying the final decisions. Take the famous “Clark doll experiment” citation at footnote eleven of the *Brown v. Board of Education* (1954)<sup>14</sup> for example. While some scholars argued that it was the landmark case where the U.S. Supreme Court recognized “sociological jurisprudence”, others asserted the Court did nothing more than embracing the authoritative appearance of the social science.<sup>15</sup> If the Court actually adopted the so-called “sociological jurisprudence” in *Brown*, the footnote eleven experiment was taken as a substance in the reasoning. But if the Court cited the experiment only for window-dressing without bearing any weight of its reasoning, then the footnote was a pure decoration. In other words, no loophole could be found in the Court’s reasoning even the experiment was not mentioned at all (of course, whether each part of the reasoning is valid or satisfying is another question).

The original statements cited the footnote eleven in the Opinion of the Court was as followed:

“Whatever may have been the extent of psychological knowledge at the time of *Plessy v. Ferguson*, this finding is amply supported by modern authority [footnote 11]. Any language in *Plessy v. Ferguson* contrary to this finding is rejected. We conclude that in the field of public education the doctrine of ‘separate but equal’ has no place. Separate educational facilities are inherently unequal. Therefore, we hold that the plaintiffs and others similarly situated for whom the actions have been brought are, by reason of the segregation complained of, deprived of the equal protection of the laws guaranteed by the Fourteenth Amendment.”<sup>16</sup>

While it may be true that the all nine Justices were subjectively driven

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13. WU GENG (吳庚) & CHEN CHUN-WEN (陳淳文), XIANFA LILUN YU ZHENGFU TIZHI (憲法理論與政府體制) [CONSTITUTIONAL THEORY AND GOVERNMENT SYSTEM] 656-58 (2013). Since they rarely involve external-knowledge and constitutional reasoning, most of the judicial censures in the TCC interpretations will be ignored by this essay.

14. *Brown v. Board of Education of Topeka*, 347 U.S. 483, 494 (1954).

15. Sanjay Mody, *Brown Footnote Eleven in Historical Context: Social Science and the Supreme Court’s Quest for Legitimacy*, 54 STAN. L. REV. 793 (2002).

16. *Board of Education of Topeka*, 347 U.S. at 494-95.

by the sense of equality and justice, the objective way they set the tone for overruling *Plessy* was firmly expressed as “Any language in *Plessy v. Ferguson* contrary to this finding [of modern authority] is rejected”.<sup>17</sup> In other words, this judgment could not hold up without the existence of “modern authority” (where the Court cited the Clark doll experiment), or if the fact that “modern authority” revealed was contradictory to Justices’ senses of equality and justice. This essay focuses more on the objective part of constitutional reasoning since the objective reasoning is what affects the legal order (for one cannot cite subjective information, such as interviews or memoirs of Justices as precedents), and it is much more difficult, if not completely impossible, to gain enough subjective information of the genuine consideration and attitude of each Justice in each decision-making for research.

#### B. *What Is MEA and Why It Is Chosen*

MEA is an analytical framework that has been used to determine the constitutionality of infringements of constitutional rights. In terms of an MEA, the TCC has a broadly applied Proportionality Test, which requires that: 1. the ends of the law must be legitimate; 2. the means, in the form of law, must be necessary for achieving the ends (with the least infringements on constitutional rights); 3. the infringement of the rights must not outweigh the legislative ends.<sup>18</sup>

Although each court may have its own adjustment (and refer to it differently), the general framework of MEA is widely adopted<sup>19</sup> by many appellate courts in different jurisdictions. Instances include (but not limited to) the U.S. Supreme Court’s Necessary and Proper Clause doctrine,<sup>20</sup> constitutional courts of most European countries,<sup>21</sup> South

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17. *Id.* at 494-95.

18. WU & CHEN, *supra* note 13, at 147-49.

19. Bernhard Schlink, *Proportionality in Constitutional Law: Why Everywhere but Here?*, 22 DUKE J. COMP. & INT’L L. 291, 297-98 (2012). See also T. Alexander Aleinikoff, *Constitutional Law in the Age of Balancing*, 96 YALE L.J. 943, 963 (1987); Vicki C. Jackson, *Ambivalent Resistance and Comparative Constitutionalism: Opening up the Conversation on “Proportionality,” Rights and Federalism*, 1 U. PA. J. CONST. L. 583, 602 (1999); Jud Mathews & Alec Stone Sweet, *All Things in Proportion? American Rights Review and the Problem of Balancing*, 60 EMORY L.J. 797, 798-801 (2011); DAVOR ŠUŠNJAR, PROPORTIONALITY, FUNDAMENTAL RIGHTS, AND BALANCE OF POWERS 146 (2010).

20. In the landmark case *McCulloch v. Maryland*, 17 U.S. 316 (1819), Chief Justice Marshall famously wrote: “Let the end be legitimate, let it be within the scope of the constitution, and all means which are appropriate, which are plainly adapted to that end, which are not prohibited, but consist with the letter and spirit of the constitution, are constitutional.” *Id.* at 421.

21. Germany is considered the leading country of the Proportionality Test. Schlink, *supra* note 19, at 297-98; WU & CHEN, *supra* note 13, at 146 (although traditionally, the German Federal Constitutional Court examines the legitimacy of ends according to the specific guidance provided by the German Basic Law); DONALD P. KOMMERS & RUSSELL A. MILLER, THE

Africa, Israel,<sup>22</sup> Canada,<sup>23</sup> and even international tribunals such as panels and appellate panels of the World Trade Organization.<sup>24</sup> To be more generalized, the ends of the law must be legitimate; also, the means must not be excessive in terms of restricting constitutional rights for pursuing those ends. MEA is chosen for its significance influence in constitutional theories at the global level, thus this research may have a broader applicability and greater contribution.<sup>25</sup>

### C. *The Underlying Presumptions of This Essay*

#### 1. *The Comparability Issue*

Before proceeding to this essay's main discourse, two underlying presumptions need to be established. First, the TCC and U.S. Supreme Court must be comparable regarding constitutional courts' utilization of external-knowledge. TCC's constitutional jurisdiction is limited to abstract review of the constitutionality of "law" while the U.S. Supreme Court's jurisdiction covers concrete cases. Moreover, the two courts equip different channels introducing external-knowledge into the review process,<sup>26</sup> which may suggest different philosophies of institutional design regarding constitutional review in each legal system.

The concern of the comparability issue is fully appreciated; nevertheless, this essay focuses on the part that both courts review i.e. the constitutionality of the (abstract) law in dispute. In other words, cases in

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CONSTITUTIONAL JURISPRUDENCE OF THE FEDERAL REPUBLIC OF GERMANY 67 (3d ed. 2012).

22. Schlink, *supra* note 19, at 296.

23. R v. Oakes, [1986] 1 S.C.R. 103 (Can.). Further analysis of *Oake* and proportionality test in Canada, see, e.g., Sujit Choudhry, *So What Is the Real Legacy of Oakes? Two Decades of Proportionality Analysis under the Canadian Charter's Section 1*, 34 SUP. CT. L. REV. 501, 520 (2006).

24. Schlink, *supra* note 19, at 298.

25. Also, this essay considers the term MEA a better option than "proportionality test" or "necessary and proper clause doctrine" for two reasons. First and foremost, the term MEA concisely generalizes the shared and essential features of other two terms. Accordingly, MEA is a concept with a broader implication than the other two, and this essay may contribute to jurisdictions adopt similar analytical frameworks. Also, MEA indicates the factors considered in constitutional reasoning while "proportionality" or "necessary and proper" are not as illustrative.

26. For more detailed comparison, Chia Wen-Yu (賈文宇), *Sifa Weixian Shenchazhong de Zhengju Pinzhi yu Shili Guandian: Cong Zhengjufa Jiaodu de Meiguo Jinyen yu Taiwan Jiejing (司法違憲審查中的證據品質與事理觀點：從證據法角度出發的美國經驗與台灣借鏡)* [A Comparative Study on "Evidence Law" in Constitutional Law: External-Knowledge's Quality Control, Experiential Perspectives, and Their Contribution to the Reasoning of the Taiwanese Constitutional Court and the U.S. Supreme Court], 20 ZHONGYENYUAN FAXUE QIKAN (中研院法學期刊) [ACAD. SINICA L.J.] 251 (2017). For instance, "amicus curiae briefs" are one channel that all kinds of interests groups can submit non-purely-legal but relevant information and opinions to the U.S Supreme Court regarding the proceeding cases. By contrast, interests groups do not have such active channel to the TCC: they submit opinions only when the Court summons.

this essay are selected because external-knowledge is adopted in the legal reasoning regarding the constitutionality of the *disputed law itself* instead of its application to the fact of the case. The channels of introducing external-knowledge are different indeed; nevertheless, both TCC and U.S. Supreme Court have several (though different) options inviting external-knowledge into decision-making and constitutional reasoning when they deem helpful;<sup>27</sup> and they actually do in cases selected in later sections. Those are the similarities that provide basis for this comparative study.

## 2. *Are Interdisciplinary Approaches Permissible under Separation of Powers?*

Another underlying presumption of this essay is that interdisciplinary approaches and adopting external-knowledge in constitutional reasoning must be constitutionally permissible. To certain threads of jurisprudence, adopting external-knowledge in constitutional reasoning means making policy-decision, which should be rejected because it would breach the separation of powers between judicial and political branches;<sup>28</sup> nevertheless, interdisciplinary approaches are inevitable for legal reasoning and decision-making to other legal schools.<sup>29</sup> This essay sides with the latter proposition, but to give sound justification requires much deeper contemplation that is not affordable for the moment.

## D. *Methodology and the Structure of this Essay*

This essay primarily investigates constitutional cases from the TCC and the U.S. Supreme Court, and the literature involving the idea of

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27. *Id.* at 255-60, 275-79.

28. Dan M. Kahan, Comment, *Foreword: Neutral Principles, Motivated Cognition, and Some Problems for Constitutional Law*, 125 HARV. L. REV. 1, 37-38 (2011). See also HUANG SHU-PENG (黃舒芃), *Shuzi hui Shuohua? Cong Dafaguanshizi Di Wubasi Hao Jieshi Tan Shishi Rending zai Guifan Weixian Shencha de Diwei* (數字會說話?—從大法官釋字第五八四號解釋談事實認定在規範違憲審查中的地位) [*Does Number Speak for Itself? The Role of Fact-Finding in Abstract Judicial Review—A Case Study on Interpretation No. 584*], in BIANQIAN SHEHUIZHONG DE FAXUE FANGFA (變遷社會中的法學方法) [LEGAL METHODOLOGY IN A CHANGING SOCIETY], *supra* note 2, at 127, 156-66.

29. See, e.g., BRIAN Z. TAMANAHA, *A GENERAL JURISPRUDENCE OF LAW AND SOCIETY* 47-48 (2001); Richard A. Posner, *Legal Formalism, Legal Realism, and the Interpretation of Statutes and the Constitution*, 37 CASE W. RES. L. REV. 179, 181 (1986); MONAHAN & WALKER, *supra* note 6; Victoria Nourse & Gregory Shaffer, *Varieties of New Legal Realism: Can a New World Order Prompt a New Legal Theory?*, 95 CORNELL L. REV. 61, 99-114 (2009); MICHAEL MARTIN, *LEGAL REALISM: AMERICAN AND SCANDINAVIAN* 46-53, 89-95 (1997); PHILIPPE NONET & PHILIP SELZNICK, *LAW & SOCIETY IN TRANSITION: TOWARD RESPONSIVE LAW* 1-27 (Transaction Publisher 2001) (1978).

adopting external-knowledge in constitutional reasoning. As a revision of my doctoral dissertation chapters, this essay also contains some fragments of the in-depth interviews I conducted (for my dissertation) with some TCC Justices regarding their experience and comments when adopting external-knowledge in TCC's deliberation and decision-making process. Without unduly burdening this essay, the full version of the interview report is available in the doctoral dissertation.

The following sections will examine the role that external-knowledge plays in evaluating the legitimacy of the purpose (II.) and assessing excessiveness of the means (III.) of TCC cases, and then American experience will be compared and discussed in IV.

### III. THE EVALUATION OF LEGITIMATE ENDS

The existent constitutional standard in the TCC generally requires that the "ends" of a constitutional right restriction be "legitimate." Historically, the TCC had not seriously reviewed the legitimacy of ends until *J.Y. Interpretation No. 445* (1998), the case in which the Court upheld most of the disputed statutory regulations of the Assembly and Parade Act. Nevertheless, external-knowledge was not mentioned in association with the legitimacy review of any opinion rendered in *J.Y. Interpretation No. 445*. A better example from the TCC, for this research, would be *J.Y. Interpretation No. 646*, which involved the criminal punishment of electronic arcade owners who failed to register their businesses.

#### A. *The Case Brief of J.Y. Interpretation No. 646 (2008)*

The law in dispute in *J.Y. Interpretation No. 646* involves the constitutionality of the criminal liability imposed on the owners of electronic arcades who fail to register their business with the governing authority. The TCC reviewed the disputed law with MEA (noted as proportionality test) and upheld the disputed law accordingly.

The majority opinion of *J.Y. Interpretation No. 646* did not cite any external references for support; however, it explicitly stated that the legislative purpose was legitimate for protecting minors from obsessive gambling via electronic gaming in unregistered arcades. The majority opinion cited government statistics stating that while less than 10% of registered arcades illegally provided gambling games, 90% of unregistered arcades were involved in such an enterprise. According to this finding, the majority opined that failure to complete registration was "highly correlated" with providing gambling games. Since gambling is

criminalized in Taiwan, imposing criminal punishment for such a failure was also intended to justify this highly correlated behavior.<sup>30</sup>

Justice Y. H. Hsu challenged the majority's factual presumption of the mental harm to minors. In her dissenting opinion, Justice Hsu argued that she could not find any empirical evidence in support of the harm speculated about by the majority; in contrast, she cited an official investigation that indicated electronic arcades were decreasing in number and being replaced by Internet cafes. Moreover, the risk of gambling addiction may justify a need for registration and licensing; however, since risk does not equate to harm, criminal punishment should be reserved for "providing gambling games" (vs. "failure of registration").<sup>31</sup>

#### B. *Building Legitimacy on Causality, Probability, or Speculation*

*J.Y. Interpretation No. 646* presents a basic form of the examination of legitimate ends. *Was there a real problem to be solved (i.e. legitimate end), or one based on myth or speculation? If the problem was real, what was the cause then?* These two issues relate to discussions latter in this essay about the assessment of effectiveness of disputed provisions (as the means) and the debate between using causal or correlational evidence for constitutional reasoning. Logically speaking, if no real problem exists, the infringement of constitutional rights (of any kind) would be excessive or arbitrary; thus, doctrinally, a review of the legitimacy of ends is the prerequisite for the entirety of excessiveness and thus, the first part of the proportionality test review. Still, at this point, in terms of the function of external-knowledge, there was no fundamental difference between the review of legitimacy of ends and excessiveness of means (discussion in detail can be found in **Part. III**). As a result, the difficulties and the solutions would be alike.

#### C. *How Is It Legitimate in the First Place?*

##### 1. *Lesser Burden of Proof: J.Y. Interpretation No. 719 and Affirmative Action*

In cases like *J.Y. Interpretation No. 646*, the psychological health of minors was clearly something worth protecting and the examination focused on factual questions such as causality/correlation. However, in certain situations, *legitimacy* itself was a key concern. For example,

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30. Sifa Yuan Dafaguan Jieshi No. 646 (司法院大法官解釋第646號解釋) [Judicial Yuan Interpretation No. 646] (Sept. 5, 2008) (Taiwan).

31. *Id.* (Y. H. Hsu J., dissenting).

affirmative action that benefits certain groups (for their race, gender . . . etc.) might be a violation of the principle of equality (*e.g.* treating likes alike) and challenged by constitutional complaints. Therefore, the argument would need to explain why it is worthy of a sacrifice of equality to support affirmative action without changing the equal protection doctrines.

Sometimes the burden of proof is less heavy. In *Interpretation No. 719* (2014),<sup>32</sup> the disputed provision required a government contractor with more than 100 employees to hire indigenous people such that no less than one percent of the overall workforce would be indigenous throughout the duration of the contract. The contractor who failed to meet this requirement would be charged with a “substitute fee,” which would be equivalent to the minimum wage and sponsor the Indigenous Peoples Comprehensive Development Fund.

The legitimacy end review was not a difficult task since the first clause, paragraph 12, article 10 of the Amendment to the Constitution, stipulates:

The state shall, in accordance with the will of the ethnic groups, safeguard the status and political participation of the indigenous people. The state shall also guarantee and provide assistance and encouragement for indigenous people’s education, culture, transportation, water conservation, health and medical care, economic activity, land, and social welfare, measures for which shall be established by law. The same protection and assistance shall be given to the people of the Penghu, Kinmen, and Matsu areas.

The disagreement between the majority, concurring, and dissenting camps was not so much related to the legitimacy of legislative purpose (since it has been authorized by the Constitution); instead, it focused on the excessiveness of the means and the balance between the sacrifice of equality and the livelihood of the indigenous people. Therefore, none of the seven separate opinions seriously opposed the decision in the legitimacy ends review for providing a quota for employing indigenous people.<sup>33</sup>

## 2. *Heavy Burden of Proof: J.Y. Interpretation No. 644 (2008) and Fortified Democracy Theory*

Article 2 of the Civic Organizations Act stipulated that: “[t]he organization and activities of a civic association shall not advocate

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32. Sifa Yuan Dafaguan Jieshi No. 719 (司法院大法官解釋第719號解釋) [Judicial Yuan Interpretation No. 719] (Apr. 18, 2014) (Taiwan).

33. *Id.*

Communism or the partition of national territory.” Article 53 further denied a civic association’s registration if it violated the Article 2 forbiddance. In *Interpretation No. 644* (2008), the TCC struck those two provisions down for their excessive infringement of the freedom to association and freedom of speech protected by the Constitution.<sup>34</sup>

The prohibitions on advocating communism and the partition of territory in Taiwan were the two prime directives under the authoritarian governance of Kuomintang (KMT, Nationalist Party), intended to protect its legitimacy of ruling after losing the Chinese Civil War in mainland China.<sup>35</sup> The provisions’ goals were to eliminate the growth of communism in Taiwan and to secure the connection between Taiwan and the mainland in order to claim its ruling legitimacy and sovereignty over China as a whole.<sup>36</sup> After the democratic transition, freedom to association and freedom of speech had generally been guaranteed; thus, the provisions had become more of a law on paper (vs. a law in action).

In spite of the disputed provision’s apparent violation of the notion of liberal-democratic constitutionalism,<sup>37</sup> Article 5, Paragraph 5 of the Amendment to the Constitution was made during the democratic transition and stated that “[a] political party shall be deemed unconstitutional in the event its goals or activities endanger the existence or the democratic constitutional order of the Republic of China.” This special constitutional mechanism was affected by the German Basic Law and its theory of “fortified/militant democracy (*Streitbare Demokratie*).”<sup>38</sup> Constitutional courts are enabled to conduct special trials to mitigate the likelihood of future Nazi-like parties. This is important since elections generally involve multiple parties and the parties elected have the potential to terminate individual liberties; this mechanism is widely adopted by many new democracies with histories of authoritarian or fascism regimes (e.g., Taiwan, Hungary, Bulgaria, Ukraine, and the

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34. Sifa Yuan Dafaguan Jieshi No. 644 (司法院大法官解釋第644號解釋) [Judicial Yuan Interpretation No. 644] (June 20, 2008) (Taiwan).

35. *See id.* (Lin, J. concurring) (T. L. Hsu, J., concurring); *see also* CHANG ET AL., *supra* note 1, at 20-22.

36. In other words, to hold against the “Taiwan Independent movement.” *See* Brief for Petitioner, J.Y. Interpretation No. 644.

37. At least from American perspective. DAVID P. CURRIE, *THE CONSTITUTION OF THE FEDERAL REPUBLIC OF GERMANY* 213 (1994).

38. J.Y. Interpretation No. 644 (Lin, J., concurring) (T. L. Hsu, J. concurring). For general introduction of this theory in English, *see, e.g.*, KOMMERS & MILLER, *supra* note 21, at 285-301; Karl Loewenstein, *Militant Democracy and Fundamental Rights*, 1, 31 *AM. POL. SCI. REV.* 417 (1937); Ronald J. Krotoszynski, Jr., *A Comparative Perspective on the First Amendment: Free Speech, Militant Democracy, and the Primacy of Dignity as a Preferred Constitutional Value in Germany*, 78 *TUL. L. REV.* 1549 (2004); Judith Wise, *Dissent and the Militant Democracy: The German Constitution and the Banning of the Free German Workers Party*, 5 *U. CHI. L. SCH. ROUNDTABLE* 301 (1998).

European Court of Human Rights).<sup>39</sup> Thus, this amendment seems to provide a textual foundation for prohibitions on political parties' ideologies and activities.

This constitutional amendment was used to legitimate the legislative purpose of the disputed provision. Although no dissenter explicitly opposed striking down the prohibition, the legitimacy of the purpose was in dispute.<sup>40</sup> In his concurring opinion, Justice Lin was persuaded by the fortified democracy theory. He viewed the amendment as opposing ideologies that would jeopardize “the existence or the democratic constitutional order of the Republic of China” and that the purpose of such law (in pursuant of this value) should be deemed constitutional. The problem with the disputed provision was the vague definition of “communism and secessionism” and its failure to demonstrate its connection to defending the existence or the democratic constitutional order of the Republic.<sup>41</sup> In other words, in what way would communism and secessionism harm those values?

By contrast, Justice T. L. Hsu thought the constitutional amendment did not actually adopt the fortified democracy theory. He made a formal/textual-based distinction, clarifying that the Taiwanese amendment targeted *only* political parties (vs. the German design, which targeted *all* kinds of civic associations). He offered a spectrum of interpretations of the amendment (from loose to strict) and categorized fortified democracy theory and the German practice as one extreme and endorsed the other extreme. The German practice would oppress parties with ideologies that are against liberal-democracy before they obtain any substantial influence. He referred to the earlier case *J.Y. Interpretation No. 445* that announced the “clear and present danger” standard for restricting political speech and determined that the Constitution only permits a prohibition on freedom to association and freedom of speech when a clear and present danger exists. The disputed provision was to ban parties from registration before any “clear and present danger” might occur. As a result, he deemed the ends of the provision as illegitimate.<sup>42</sup> Justice Y. H. Hsu also agreed with Justice

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39. Patrick Macklem, *Militant Democracy, Legal Pluralism, and the Paradox of Self-Determination*, 4 INT'L J. CONST. L. 488 (2006).

40. The majority opinion did not specify on this point, although it was categorized as a strict-scrutiny case by scholars and Justices who rendered separate opinions. See Hwang Jau-Yuan (黃昭元), *Dafaguan Jieshi Shenchabiao zhun ji Fazhan (1996-2011): Biliyuanze de Jisho yu Zaidihua (大法官解釋審查標準之發展(1996-2011)：比例原則的繼受與在地化)* [Development of Standards of Review by the Constitutional Court from 1996 to 2011: Reception and Localization of the Proportionality Principle], 42 TAIDA FAXUE LUNCONG (臺大法學論叢) [NTU L.J.] 215, 229, 246 (2013).

41. He struck down the provision for the excessiveness of means. *J.Y. Interpretation No. 644* (Lin, J., concurring).

42. *Id.* (T. L. Hsu, J., concurring).

T. L. Hsu on this point and gave similar reasoning when reviewing the legitimacy of the legislative ends.<sup>43</sup>

### 3. *The Legal Status and Instability of External-Knowledge*

These two TCC cases involved different but fundamental rights restrictions that were reviewed under heightened scrutiny. Although both of the disputed provisions had some support within the text of the Constitution, this did not guarantee a specific judgment on legitimacy of the ends.

Regarding the use of external-knowledge in reviewing legitimate ends, *J.Y. Interpretation No. 644* presents several topics for further discussion. First and foremost, the status of the fortified democracy theory in the Constitution was in dispute. Justice Lin interpreted the Taiwanese design from a general and broad understanding of the theory; but Justice T. L. Hsu detailed very specific differences between the Taiwanese design and its German counterpart and determined the Taiwanese design did not adopt the theory. However, with the help of the theory, Justice Lin could determine the legitimacy judgment of the legislative ends. Without the support of the theory, Justice T. L. Hsu needed to justify his narrow interpretation of Article 5, Paragraph 5 of the Additional Provisions (among a spectrum of different possible choices). His reference to *J.Y. Interpretation No. 445* could only explain the high value of political speech; however, it failed to explain why it should outweigh the protection of the liberal-democratic value and the Republic.

The method for defining the scope and determining content of a theory is a separate issue. Although the development of fortified democracy theory is a useful paradigm, the scope of this special mechanism has been narrowed in recent years by the German Constitutional Court.<sup>44</sup> The development of the theory did not change the fundamental notion that freedom of association and freedom of speech are limited to avoid jeopardizing the liberal-democratic constitutional order; however, the scope has become so narrowed that it might not be an extreme proposition any longer (as Justice T. L. Hsu described and understood it). The developing and changing nature of all kinds of knowledge is considered “progress,” but it would hurt the consistency and stability of legal order when it is integrated into legal reasoning.

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43. *Id.* (Y. H. Hsu, J., concurring in part, dissenting in part).

44. KOMMERS & MILLER, *supra* note 21, at 300-01.

## IV. THE ASSESSMENT OF THE EXCESSIVENESS OF THE MEANS

External-knowledge is sometimes used by constitutional courts to measure the impact of a disputed provision via an external standard; the outcome of that measurement provides a foundation for the courts to assess the excessiveness of the disputed provision. In *J.Y. Interpretation No. 584* (2004), the TCC dealt with the constitutionality of legislation prohibiting the perpetrators of violent crimes from applying for taxi driver licenses indefinitely. For the first time, the majority opinion of the TCC clearly cited governmental statistical data as the substance of their proportionality test, which assessed the excessiveness of the disputed provision.

The use of numerical data in this case set off fierce debates among the Justices and Taiwanese legal academics about the role of external-knowledge in constitutional decision-making. The topics raised in these debates included basic analytical skills associated with numerical data, the use and choice between the evidence of causality and of probability, and the borderline between quantity changes to quality change. The “least infringement” requirement was also examined in *Int.584*; this revealed that an interdisciplinary approach may yield challenges beyond the use of numerical data.

A. *Case Brief of J.Y. Interpretation No. 584 (2004)*

The disputed provision was amended in 1999 to prohibit a person who committed a violent crime (and was convicted by a confirmed and irrevocable judgment) from ever registering as a taxi driver. In 1997, the rate of recidivism and repeated perpetration of the same offenses by taxi drivers convicted of violent crimes was 4.24% (or as high as 22.22% if the commission of other crimes was also taken into account). In general, recidivism in 1997 stood at 43%; however, after the law was amended, the number of taxicab drivers committing crimes showed some decline.

Nevertheless, the percentage of ex-prisoners who had their parole revoked after committing a crime in 2003 was 27.2% (vs. 30% in 1997). The majority opinion considered the figures rather high. Although predictions of repeated criminal offenses based on quantitative methods may not be perfect, the Court respected the judgment of the relevant authorities and legislators. However, the Court concluded that, as it constituted a restraint on individual freedom to choose one’s occupation, the disputed provision must be reviewed and modified when the situation changes.

The average rate of recidivism for all ex-prisoners in the seventh year

after release fell to 1.5% from 1992 to 2002; in the tenth year after release, the rate fell to less than 1%. The Court “suggested”<sup>45</sup> that the legislators should consider this factor and shorten the prohibition when a reliable, *ad hoc* evaluation procedure was available. Even so, since other alternative means of enhancing passenger safety (e.g., GPS trackers) was not practical, the Court considered the disputed prohibition to be necessary and thus constitutional.

In summary, the TCC made three major judgments in order to reject the claim of excessiveness and uphold the constitutionality of the disputed provisions: “the ratio of recidivism was high;” “the prohibition was ‘effective enough’ to enhance the safety of the passengers;” and “there was no practical alternative.” The first two statements were supported by statistical data; the third was the outcome of the comparison between the disputed provision and the alternative means that no supporting external information was found in the majority reasoning.

#### B. *The Effectiveness of Means, and External-Knowledge Regarding Internal and External Justification*

Dr. Chiou provides a theoretical framework for analyzing how legislative facts (could) has been utilized in legal (constitutional) reasoning. He cited Kenneth Culp Davis and Robert Alexy for references to argue that empirical data could be utilized for *internal justification* and *external justification*: internal justification involves the logical reasoning from major premise to minor premise, while external justification examines the correctness regarding the premises themselves.<sup>46</sup> This essay will follow this dichotomous framework and examine how statistical data, as an instance of external-knowledge, (could have) involves in this prong of MEA.

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45. To be more specific, it was only advice (vs. a demand or order) for the Legislature’s reference. The Legislature’s failure of compliance will not necessitate a violation of the Constitution or the Interpretation. It is a unique practice of the TCC. It is easily confused with the German practice of “admonitory decision (*Appellentscheidungen*, which actually announces the unconstitutionality of the provision).” See WU & CHEN, *supra* note 13, at 656-58; KOMMERS & MILLER, *supra* note 21, at 36.

46. Qiu Wen-Cong (邱文聰), *Beihulue de (Lifa) Shishi: Tanxun Shizheng Kexue zai Guifan Lunzhengzhong de Keneng Jiaose Jianping Shizi Di 584 Hao Jieshi (被忽略的(立法)事實：探尋實踐科學在規範論證中的可能角色兼評釋字第584號解釋)* [Facts Neglected: The Possible Role of Social Science in Legal Reasoning, Also a Comment on J.Y. Interpretation No. 584], 37 TAIDA FAXUE LUNCONG (臺大法學論叢) [NTU L.J.] 233, 244-47 (2008).

### 1. *Statistical Data in Internal Justification*

The separate opinions expressed in *J.Y. Interpretation No. 584* partly came from the interpretation of the statistical data cited in the Opinion of the Court. As Dr. Chiou argues, their focus was primarily about the internal justification: namely, within the adopted standard (i.e. proportionality test in this case), whether the cited data logically support the Court's conclusion.

In his dissenting opinion, Justice T. Y. Lin opined that the government failed to demonstrate that the fall in violent crime by taxicab drivers was attributed to the enactment of the disputed provision. He proposed some alternative explanations (e.g., the popularity of mobile phones that several taxi companies had voluntarily utilized to enhance passenger safety). Therefore, except for "common sense," there was no empirical information to show whether the disputed provision effectively contributed to the decrease in violent crimes committed by taxi drivers.<sup>47</sup>

Justice Lin also attacked the majority's double standard in its use of statistical data. The fact that the ratio of recidivism would decrease over time after imprisonment (the ratio of recidivism was 1.5% after the seventh year of release and less than 1% after the tenth year) did not affect the constitutionality judgment as other statistical data did when reviewing the effectiveness of the lifetime ban.<sup>48</sup> In other words, the majority upheld the constitutionality of the lifetime ban regardless of the obvious decrease in the ratio of recidivism. Thus, the empirical data cited here did not carry the same weight as the empirical data cited in earlier paragraphs of the majority opinion to dictate the constitutionality of the disputed provision; it only entailed a judicial recommendation for better legislation.

In another dissenting opinion, Justice Y. H. Hsu examined the data more closely and interpreted them along opposite lines. The disputed provision was enacted in 1999; however, she noted that the tendency toward a decline in repeat offenses was found mostly *before* enactment (from 1992 to 2002). Interestingly, the "high recidivism" data were collected *after* enactment (2003, 27.2%). Thus, the majority opinion cited data and applied it to factual claims separately, which was arguably not an entirely incorrect interpretation. However, Justice Y. H. Hsu connected the data with an element of time and concluded that the data cited by the majority demonstrated a failure of the provision.<sup>49</sup>

Furthermore, Dr. Chiou used the statistical idea of "relative risk" to

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47. Sifa Yuan Dafaguan Jieshi No. 584 (司法院大法官解釋第584號解釋) [Judicial Yuan Interpretation No. 584] (Sept. 17, 2004) (Taiwan) (Lin, J., dissenting).

48. *Id.*

49. *Id.* (Y. H. Hsu, J., dissenting).

explain why the cited external-knowledge and the majority's analysis were mostly irrelevant and far from satisfying. According to the structure of the majority's reasoning, meaningful and sophisticated factual inquiries should contain at least four factors: (1) the number (as **A**) of violent crimes happening during taxi rides that were perpetrated by violent recidivists; (2) the number (as **B**) of rides provided by drivers with violent criminal records; (3) the number (as **C**) of violent crimes occurring in taxi rides, which were not perpetrated by violent recidivists; and (4) the number (as **D**) of rides provided by drivers without criminal records. The comparison of ratios **A/B** and **C/D** would be a much more accurate assessment than the one provided by the Court.<sup>50</sup> Unfortunately, the Court failed to collect and present the required information in the first place<sup>51</sup> and thus perform such an analysis.

## 2. *What Does Internal Justification Tak—Causality or Probability?*

A more fundamental issue presented by *J.Y. Interpretation No. 584* is the metaphysical understanding and appreciation of statistical data. Statistical data presents probability rather than causality. In other words, statistical data can only speak of a general situation and cannot be used to determine the causal relationship of an individual case. It seems to be common sense that social science research does not “prove” anything in an absolute sense; it only “assigns a probability to the truth or falsity of assertions that are tested.”<sup>52</sup> For example, the majority of *Int.584* acknowledged that exceptions to a lifelong ban are inevitable; thus, it “suggested” that if an ad hoc review process of the criminal risk becomes (scientifically) possible, the Legislature should lift the lifelong ban accordingly.

In Justice Lin's dissenting opinion of *J.Y. Interpretation No. 584*, he deemed that the risk assessment of the taxi driver should be conducted on an ad hoc basis and identified a missing component in the majority's reasoning (i.e., whether over-inclusion should be tolerated). To be more specific, he considered that the general ban violated due process protection (i.e., it was constitutionally excessive to deprive the right to work via a lifelong ban). In contrast, a mandatory risk assessment would be more effective for people applying for taxi driver licenses who have

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50. Qiu, *supra* note 46, at 263-68.

51. As Justice T. Y. Lin complained, the Court actually demanded some of the “required information,” but the government did not provide those data. *J.Y. Interpretation No.584* (Lin, J., dissenting).

52. MONAHAN & WALKER, *supra* note 6, at 102.

violent criminal records. He felt this would mitigate the risk of “over-inclusion” and thus be more constitutionally acceptable.

Justice Lin’s logical proposition represents a zero-tolerance of exception; this would deny almost every constitutional review at the abstract level of the law and only accept review on the as-applied level (the only reviewable type would be limited to procedural supervision of the decision-making process). As a result, a large portion of external-knowledge (e.g., statistics and numerical data) would be completely useless for internal justification since Justice Lin’s expectation from external-knowledge is an airtight proof of causality. While the TCC generally does not review constitutionality on the as-applied level and does not decide the outcome of individual cases,<sup>53</sup> this extreme proposition could hardly be reconciled with the TCC current functions and practices. Therefore, it should be safe to presume that Justice Lin did not intend to drive that logic to an extreme position.

Consequently, since constitutional review inevitably includes a review of the law, the constitutional court must think more like a legislature on the abstract level, rather than an ad hoc adjudicator.<sup>54</sup> The Court could demand that the study show “statistical significance”<sup>55</sup> to demonstrate an association between criminal records associated with acts of violence and offenders of violent crimes associated with taxi rides. By contrast, it would be difficult to know, for an individual case, whether a certain variable was a factor (vs. simply due to chance) on an ad hoc basis review; the utilization of adjudicative facts would not reflect the overall situation when a Court reviews the abstract law. The utilization of statistical data can help the Court understand the facts more precisely so that the normative judgment (of whether over-inclusion is constitutionally excessive) can be made based on reality rather than speculated presumption.

### 3. *From Quantity Change to Quality Change—A(nother) Kind of External Justification in MEA*

Dr. Chiou argues that one hidden issue in *J.Y Interpretation No. 584* was that the law in dispute may also discriminate against the people with violent criminal records. In other words, the law in dispute may reject

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53. WU & CHEN, *supra* note 13, at 617-26, 656-65.

54. Admittedly, this proposition would raise concerns regarding the principle of separation of powers, but at this point, the term “legislature” actually refers to abstract review. Please refer section I. C. of this essay for preliminary discussions.

55. See ERICA BEECHER-MONAS, *EVALUATING SCIENTIFIC EVIDENCE: AN INTERDISCIPLINARY FRAMEWORK FOR INTELLECTUAL DUE PROCESS* 60-62 (2007).

criminals' rehabilitations by denying their access becoming taxi drivers; moreover, such policy may be supported by empirical data created with "statistical discrimination". As an instance for external justification, he urges more empirical study may find more legislative facts to provide an alternative perspective to redefine concept of equality protected by constitutional law.<sup>56</sup>

In contrast to Dr. Chiou's interest in identifying the impact that legislative facts (as external justifications) may have on exploring the concept of equality, this essay focuses on MEA and how external-knowledge (in this case, statistical data) may bring external justifications to it.

Statistical data are presented in the form of numbers. Following the framework of MEA in cases like *J.Y Interpretation No. 584*, one needs to define "effective" or "necessary" by integrating the number of recidivism rate into his/her legal reasoning. Dr. Shu-Peng Huang directly challenged such judgment of "high recidivism" and asked whether a bright-line could possibly and reasonably be drawn to tell a number from high to low.<sup>57</sup> As a result, if numerical judgment depends purely on subjective preferences (vs. objective or legal reasons), then she argued that Justices should not justify their decisions according to preference alone.<sup>58</sup> Nonetheless, philosophy of (social) sciences and psychology may mitigate her concern from different points of view.

#### (a) The Philosophical Perspective

As Dr. Huang suggested, it is difficult to draw a bright-line to tell high from low. Nevertheless, it is not logically impossible or dependent on subjective preferences. Georg Wilhelm Friedrich Hegel's dialectical principle provided a philosophical foundation for the transition from quantity change to quality change.<sup>59</sup> For example, Hegel suggested that one additional grain could make several grains into "a heap of wheat" and expanded this concept to many categories, including value judgments (e.g., the line between "frugality" and "stinginess" for judging a man's expenditure). He also suggested that if a country's constitution should somehow match its territory and population, one could easily claim that the constitution of a Swiss canton, for example, would not match the

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56. Qiu, *supra* note 46, at 270-74.

57. HUANG, *supra* note 28, at 149-52.

58. *Id.* at 164-65.

59. 1 GEORG WILHELM FRIEDRICH HEGEL, XIAO LUOJI (小邏輯) [THE SYSTEM OF PHILOSOPHY: THE LOGIC] 240-42 (He Lin (賀麟) trans., 1998) (1830).

Roman Empire's need for governance.<sup>60</sup>

Two propositions can be inferred from Hegelian philosophy. First, the constitutional courts must keep an open and reliable channel for the observation of "quantity change" because factual understanding via effective measurement (*das Maß*) is required to judge whether the transition happens.<sup>61</sup> Second, the judgment of whether the transition happens will directly or indirectly reflect certain numerical bright-line rules. As in *J.Y. Interpretation No. 708*, the TCC determined that 15 days was a "reasonable working period" and set it as a maximum detention period for illegal immigrants (before their deportation or judicial review). There may have been superior normative arguments in support or opposition of this 15-day line; however, empirical studies direct our attention from conceptual reasoning to psychological influences in the context of judges making numeric judgments.

#### (b) The Psychological Perspective--Anchoring Effect

After reviewing multiple psychological studies bearing in legal decision-making, Professor Jeffrey J. Rachlinski and his colleagues found that "anchoring has proven to be a robust phenomenon that affects all manner of judgments," especially when it comes to numbers.<sup>62</sup> The anchoring effect suggests that numerical reference points significantly affect numeric judgments much more than reasonable estimates (on the merits).<sup>63</sup> The anchoring effect penetrates processes related to numerical judgments so powerfully that it occurs even when reference points are "bizarre"<sup>64</sup> or when such referencing is "normatively indefensible."<sup>65</sup> Moreover, judges under civil law traditions (e.g., German and Dutch judges) were also vulnerable to the anchoring effect like their common law counterparts (e.g., U.S. and Canadian judges).<sup>66</sup>

The anchoring effect is not all bad. Reasonable reference points can be a convenient proxy for making numerical decisions; however, this

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60. *Id.*

61. *See id.* at 238-42.

62. Jeffrey J. Rachlinski et al., *Can Judges Make Reliable Numeric Judgments? Distorted Damages and Skewed Sentences*, 90 *IND. L.J.* 695, 702 (2015).

63. *Id.* at 695-96, 710.

64. Chris Guthrie et al., *The Hidden "Judiciary": An Empirical Examination of Executive Branch Justice*, 58 *DUKE L.J.* 1477, 1501-06 (2009).

65. Rachlinski, Wistrich & Guthrie, *supra* note 62, at 731-32.

66. For the experiment including Dutch, American and Canadian judges, *Id.* at 729-36; and for the experiment included German judges, Birte English et al., *Playing Dice with Criminal Sentences: The Influence of Irrelevant Anchors on Experts' Judicial Decision Making*, 32 *PERSONALITY & SOC. PSYCHOL. BULL.* 188 (2006).

requires “enough cognitive effort” to adjust.<sup>67</sup> The Rachlinski study recommended three ways to minimize the negative influences of the anchoring effect on judges, including (i) prohibition on mentioning figures; (ii) exposure to meaningful anchors; or (iii) restriction on a judge’s discretion.<sup>68</sup> Considering the authoritative role that a constitutional court usually plays in the judiciary, the prohibition on figures and restrictions on discretion would be least desirable. By contrast, multiple studies have suggested that increasing exposure to meaningful anchors seems more feasible—even when anchors are mutually competing.<sup>69</sup> With proper quality control of the figures, the basic reasonableness of the anchors can be maintained.

The TCC case *J.Y. Interpretation No. 708* serves a better example to demonstrate the positive side of anchoring effect; by contrast, the majority Justices in *J.Y. Interpretation No. 584* may miss a chance to provide a sound external justification for their reasoning under the framework of MEA. Prior to the deportation of illegal immigrants, Article 38, Paragraphs 1 and 2 of the Immigration Act (2011) authorized the use of 60-day temporary detentions (which could be extended for another 60 days when necessary) by the National Immigration Agency (NIA). However, Article 8, Paragraph 1 of the Constitution guarantees general personal (physical) freedom and thus requires all detentions to be reviewed by the Judiciary.<sup>70</sup> *J.Y. Interpretation No. 708* struck down Article 38 of the Immigration Act, acknowledged illegal immigrants’ entitlement to the rights within Article 8 of the Constitution, and required detentions (and extensions) to be reviewed by the Judiciary. Furthermore, the majority opinion clearly ruled that since 70% deportations could be finished within 15 days (according to official statistical data), a “reasonable” detention should not exceed 15 days.

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67. Amos Tversky & Daniel Kahneman, *Judgment under Uncertainty: Heuristics and Biases*, 185 SCI. 1124, 1124, 1128 (1974).

68. Rachlinski, Wistrich & Guthrie, *supra* note 62, at 736-38. The Rachlinski study focused on the amount of civil compensation and criminal sentencing, which are at least as complicated and specific (if not more) as value judgments of constitutionality (insofar as numerical judgments are involved). Constitutionality judgments, here, only involve excessiveness, while compensation and sentencing must both be non-excessive and effective. If more complicated (civil and criminal) judgments can be improved via these suggestions, they should also be applicable to easier judgments.

69. *Id.* at 737.

70. ZHONGHUA MINGUO XIANFA (中華民國憲法) [CONSTITUTION OF R.O.C.] § 8 para. 1 (1947) (Taiwan): “Personal freedom shall be guaranteed to the people. Except in case of flagrante delicto as provided by law, no person shall be arrested or detained otherwise than by a judicial or a police organ in accordance with the procedure prescribed by law. No person shall be tried or punished otherwise than by a law court in accordance with the procedure prescribed by law. Any arrest, detention, trial, or punishment which is not in accordance with the procedure prescribed by law may be resisted.”

Some meaningful and competing reference points are found in constitutional decision-making of this case. For example, the majority of the TCC Justices decided on 15 days as a maximum detention time for illegal immigrants (before their deportations or judicial hearings). The majority cited government statistical data and set the 15-day cap because “current practice results in around seventy percent of detainees being repatriated within fifteen days.”<sup>71</sup> However, Justice C. Y. Tsay explicitly mentioned his reference point in his concurring opinion. According to the same data, the Agency could only finish 7% of the deportations within 72 hours,<sup>72</sup> which meant that 93% of illegal immigrants would be released by choosing the alternative; this was unacceptable to Justice Tsai.<sup>73</sup> A dissenting Justice in *J.Y. Interpretation No. 708* also mentioned in the interview that he could accept 72 hours<sup>74</sup> because it was the maximum period for countries that take human rights seriously; however, 15 days was too far from this period.

The Justices’ divergent choices in *J.Y. Interpretation No. 708* serve as a good concluding example of numerical decision and anchoring effects. Most Justices were searching for a transitional line (i.e., where adding another day would become an excessive, constitutionally unacceptable means to achieve the regulatory needs of the administration vis-à-vis illegal immigrants) rather than an extreme (e.g., 24-hour) proposition. Sixty days clearly exceeded the transitional line; most of the Justices narrowed down between the 15-day and 72-hour alternatives. They used different, competing anchors to inform their decisions and justify their propositions. Eventually, a numerical bright-line rule was drawn: a two-thirds majority accepted the balance of a “70% finished rate for cases within 15 days deprivation physical freedom” as a “reasonable working period.” By contrast, the majority of the *Int.584* drew their numerical lines without reference points; thus, they did not clearly determine the transitional line. In short, reference points significantly affect numeric decisions and with proper explanation, they also effectively demonstrate how a quantity change leads to a quality change and help justify the assessment of the excessiveness of means.

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71. Sifa Yuan Dafaguan Jieshi No. 708 (司法院大法官解釋第708號解釋) [Judicial Yuan Interpretation No. 708] (Feb. 6, 2013) (Taiwan).

72. Although that particular governmental data were flawed because it were partially collected. *Id.* (Li J., concurring in part, dissenting in part).

73. *Id.* (Tsay, J., concurring).

74. He considered this a compromise. The extreme choice can be found in a 24-hour period according to Justice C.S. Li in his concurring in part, dissenting in part opinion. He made a textual argument according to Art.8 para 2 of the Constitution.

### C. *The Least Infringement Requirement*

In addition to the evaluation of the effectiveness of the means, the majority's assessment of excessiveness in *J.Y. Interpretation No. 584* provided a third reason to uphold the disputed provision: there was no practical alternative. To the majority, permanently prohibiting violent criminals from applying for taxi driver licenses was the only way to sufficiently guarantee the safety of taxi passengers.

In his concurring opinion, Justice T. L. Hsu acknowledged that the least infringement analysis was the most critical part of the proportionality principle (i.e., excessiveness) analysis,<sup>75</sup> and he correctly emphasized that those alternatives must be **equally effective** in the first place before choosing the one with the least infringing means.<sup>76</sup> Critical as this prong was, arguably the majority opinion did not provide enough analysis that substantiated their argument. In fact, the majority gave no reference to any external information in the least infringement prong except for their one-sentence conclusion after mentioning the legislative facts found in the brief session (which contrasted with the explicit citation of statistical data in the earlier stages of the proportionality test analysis).

As mentioned above, this stage contains a two-step requirement: first, the alternative must be as effective as the disputed provision; second, the alternative must be a lesser infringement of constitutional rights. Logically, if the disputed provision was the only effective means, it must satisfy the requirement of causing "the least" infringement. In the majority opinion, the Justices identified several potential alternatives mentioned in a brief session held by the TCC (e.g., mandatory installations of GPS trackers or partitions in taxis and enhancing drivers' training) but ultimately concluded that "the alternatives were not practical."

Then the separate opinions held against each other on this topic. Justice T. L. Hsu speculated that the alternative policy options (for reducing the risk of taxicab passengers) could only partially deter

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75. Mainstream constitutional scholars in Taiwan agree that it is an indispensable prong for the proportionality test analysis, especially when stricter scrutiny is applied. *See, e.g.*, Bruce Liao Yuan-Hao (廖元豪), *Gaoshenmoce, Yihuo Luanzhongyouxu? Lun Xianren Dafaguan Zai Jibenquanli Anjian Zhong de "Shencha Jizhun"* (高深莫测, 抑或亂中有序? 論現任大法官在基本權利案件中的「審查基準」) [*Fathomlessness or Ordered Chaos? Reviewing the Grand Justices' "Standard of Review" in Individual Rights Cases*], 2 *ZHONGYENYUAN FAXUE QIKAN* (中研院法學期刊) [*Acad. Sinica L.J.*] 211, 222-24 (2008); WU & CHEN, *supra* note 13, at 147.

76. *J.Y. Interpretation No. 584* (T. L. Hsu, J., concurring). This requirement was explicitly written in *Sifa Yuan Dafaguan Jieshi No. 699* (司法院大法官解釋第699號解釋) [*Judicial Yuan Interpretation No. 699*] (May 18, 2012) (Taiwan); statistical data once again were cited in the majority opinion's proportionality principle analysis.

potential criminals in advance; however, the disputed provision would prevent people with violent criminal records from ever driving taxis (and thus be more effective than the alternative).<sup>77</sup> Justice Y. H. Hsu disagreed. She cited the U.S. and British practice of utilizing GPS devices to track vehicles or criminals under probation and claimed that GPS trackers in taxis were not only technologically possible but also more effective because a comprehensive installation project would likely deter potential criminals with and without prior records. More importantly, Justice Y. H. Hsu pointed out that the “impracticality” (as stated in the brief session) was only about taxi companies’ property rights (i.e., the financial cost of installation). To her, infringement on property rights was a lesser restriction (vs. permanent deprivation of the freedom of vocational choice).<sup>78</sup>

1. *The Question that External-Knowledge Does Not Directly Address*

While Justice Y. H. Hsu was able to find information related to the technical practicality of GPS installation and cited it, none of the references (that she mentioned) claimed that the comprehensive installation was a lesser infringement of constitutional rights than the disputed provision.<sup>79</sup> It may be safe to presume that such a comparison was not available in the form of external-knowledge. The absence of such external-knowledge leads to the following presumption: disciplines other than law may be helpful in assessing effectiveness or providing cost-benefits analyses when issues can be measured by the same measurement; however, they are not as helpful when alternatives (and their consequences) cannot be measured by the same measurement.

Similar features can be found in *J.Y. Interpretation No. 699*. In this case, the Legislature sought to reduce cases of driving-under-the-influence (DUI) by enacting a provision to suspend drivers’ licenses (including commercial drivers’ licenses) for three years when drivers refused to take sobriety tests. A constitutional complaint was filed arguing that the statutory regulation excessively infringed on people’s mobility rights and the right to work; however, the Court eventually upheld the regulation.<sup>80</sup> Once again the Court cited statistical data as substance in its proportionality test analysis; and once again, no other external

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77. *J.Y. Interpretation No. 584* (T. L. Hsu, J., concurring).

78. *Id.* (Y. H. Hsu, J., dissenting).

79. In many of her separate opinions, Justice Y. H. Hsu has demonstrated her dedication of thorough investigations for case-relevant facts.

80. *J.Y. Interpretation No. 699*.

information was cited in its one-sentence conclusion stating that “a more moderate means of achieving the same effect is still lacking, hence the disputed provisions should be acknowledged as a necessary means to achieve the aforementioned legislative purpose.”<sup>81</sup> As a result, this conclusion has been criticized as fragile and ill-founded.<sup>82</sup>

## 2. *Where External-Knowledge Can and Cannot Inform the Least Infringement Analysis*

An absence of external-knowledge appears common when a comparison between different values (which often means different measurements) is required. Does this suggest an area where external-knowledge cannot inform constitutional reasoning due to lack of availability?

In TCC cases like *J.Y. Interpretation No. 584* and *J.Y. Interpretation No. 699*, the two-step least infringement analysis often stops at the first step (i.e., equally effective), where external-knowledge can be informative for constitutional decision-making and reasoning. The key for external-knowledge is to be informative; to attain this, the question must be specific and measurable. For example, while it is impossible to compare apples and oranges, it is possible to identify the fruit with more vitamin C per serving; thus, utilizing vitamin C as the standard enables a comparison of apples and oranges and a determination of superiority in this context. In a legal context, “vitamin C” has generally been identified by its legislative purpose already; thus, constitutional courts are not responsible for determining this and risk being accused of “playing favorites” or implementing judicial activism.

However, when it comes to a comparison between different infringements (as we saw in Justice Y. H. Hsu’s dissenting opinion in *J.Y. Interpretation No. 584*), the situation becomes more complicated, especially when infringements differ (e.g., freedom of vocational choice vs. the economic cost of the taxi companies) since they cannot be measured by the same yardstick. Furthermore, there is no additional information to help the Justices specify a question like legislative purpose does; thus, Justices may disagree with each other on the standard for measurement. In other words, although the Justices may all agree that they

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81. *Id.*

82. See, e.g., Lee Jian-Liang (李建良), *Jujue Jiuce yu Diaoxiao Jiazhao de Heli Guanlian yu Zhengdang Chengxu: Shizi Di 699 Hao Jieshi* (拒絕酒測與吊銷駕照的合理關聯與正當程序—釋字第699號解釋) [*The Reason and Due Process Issues of Driver’s License Revoking and Refusal of Sobriety Test—J.Y. Interpretation No. 699*], 235 TAIWAN FAXUE ZAZHI (台灣法學雜誌) [TAIWAN L.J.] 29, 40 (2013).

should perform a least infringement analysis, the situation reverts back to the apple-orange comparison in the absence of defining a relevant standard for “better” (e.g., vitamin C), and which constitutional values should rank above others (*i.e.* prioritized) is not determined. In this scenario, while the prioritization of certain values is incorporated into constitutional decision-making, external-knowledge’s service seems unrequired by parties and Justices. The absence of external-knowledge’s service here might suggest that it may not be as helpful as it is when a question is specific enough and measurable by a certain standard.

If those selected cases correctly reflect the general practice of constitutional review, this leads one to further wonder about the nature of the second step of the least infringement analysis. There are three different propositions on this subject:

(1) Justices should chiefly determine the prioritization of constitutional values according to legal materials such as constitutional texts, precedents, and principles;

(2) Justices should perform the prioritizations of constitutional values as legislators/policymakers; or

(3) that Justices should defer to the Legislature, give up prioritization of constitutional values, and uphold the disputed provision. This proposition actually denies the judicial power on conducting the second step of the least infringement review.

According to the traditional notion of judicial review, only the first proposition would be acceptable since the second proposition would blur the line that separates politics and law. Consequently, the current practice precludes the role of external-knowledge, which facilitates a forum utilized exclusively by normative legal arguments. Thus, unless external-knowledge bears normative meaning that is currently undiscovered or unrecognized,<sup>83</sup> the prioritization of different constitutional values is a “no-fly zone” relative to external-knowledge.

#### V. U.S. EXPERIENCES UTILIZING EXTERNAL-KNOWLEDGE TO SERVE EXISTENT STANDARDS

Prior sections of this essay focused on the utilization of external-knowledge in constitutional reasoning in Taiwan and raised several issues. This section will select corresponding cases associated with the U.S. Supreme Court; the focus, here, is on the use of external-knowledge in constitutional reasoning and consideration of the

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83. The question of whether and how external-knowledge bears normative meaning will be an important issue for another research essay.

issue from a highly experienced legal practice in the United States.

A. *Numerical Data, the Interpretation, and the Judgment*

The partiality of some U.S. judges for external-knowledge demonstrates a preference for certainty (vs. probability), which is a result that most social science research simply cannot provide.<sup>84</sup> In the United States, numerical data appear to be of particular interest to Justices when they are presiding over constitutional cases (e.g., statistical data have a greater value to U.S. Supreme Court justices than clinical data<sup>85</sup> when they are presiding over abortion and sex-discrimination cases).<sup>86</sup> Unfortunately, this preference does not always lead to correct interpretations, judgments, or even utilizations of the data adopted by the Court. Also, the transition point from quantity change to quality change is a critical challenge to the Court. Those issues can be found in a high profile, U.S. Supreme Court death penalty case: *McCleskey v. Kemp* (1987).<sup>87</sup>

1. *Case Brief of McCleskey v. Kemp (1987)*

McCleskey, an African-American, was convicted of two murders and sentenced to death. In this case, based on statistical data presented by the Baldus study (research on more than 2,000 murder cases in Georgia to find if racial discrimination was present in the sentencing process of death penalty), the majority acknowledged that racial discrimination systematically existed in the jury's sentencing process.<sup>88</sup> Integrating the Baldus study, McCleskey's attorney argued that the Georgia capital punishment system violated the U.S. Constitution's Fourteenth Amendment (the equal protection clause)<sup>89</sup> and Eighth Amendment (prohibition of cruel and unusual punishment).<sup>90</sup> Nevertheless, the U.S. Supreme Court rejected both arguments.

Before *McCleskey*, the Court's Fourteenth Amendment jurisprudence had accepted statistical data as evidence of two kinds of racially

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84. BEECHER-MONAS, *supra* note 55 at 54-55. See also MONAHAN & WALKER, *supra* note 6, at 101-02; CEDRIC CHARLES GILSON, THE LAW-SCIENCE CHASM: BRIDGING LAW'S DISAFFECTION WITH SCIENCE AS EVIDENCE 32-33 (2012).

85. By clinical data, Erickson & Simon means information involves more contextual ("histories and anecdotes") factors. ROSEMARY J. ERICKSON & RITA J. SIMON, THE USE OF SOCIAL SCIENCE DATA IN SUPREME COURT DECISIONS 47, 152 (1998).

86. *Id.* at 152.

87. *McCleskey v. Kemp*, 481 U.S. 279 (1987).

88. *Id.* at 286-90.

89. *Id.* at 291-93.

90. *Id.* at 299-300.

discriminatory legislation: (1) “the selection of the jury venue in a particular district” and (2) employment protection under Title VII of the Civil Rights Act of 1964.<sup>91</sup> However, the Court rejected *McCleskey*’s petition for two reasons. First, the majority found the statistical study (as a description of a general situation) could not sufficiently clarify a connection between racial discrimination and the jury associated with the *McCleskey* case. Instead, the majority reasoned that every jury is different, while decision makers remained the same in the other two types of cases involving statistical data accepted by the Court.

Also, in the two accepted scenarios, the Court determined that “the statistics relate to fewer entities, and fewer variables are relevant to the challenged decisions” and that decision makers had opportunities to explain the seemingly discriminatory situations. By contrast, such opportunities do not exist for juries.<sup>92</sup> Furthermore, the Court deemed that the *McCleskey* case and Baldus study failed to demonstrate that the Georgia State Legislature intentionally kept the death penalty for discriminatory purposes. To the majority, the Baldus study merely showed “adverse effects.”<sup>93</sup> Thus, they interpreted these two factors as a basis precluding for the use of statistical data in the examination of jury-sentencing discrimination under the Fourteenth Amendment.

As for the Eighth Amendment, the majority followed the “arbitrary and capricious manner” test and concluded that the Baldus study, at best, demonstrated the “likelihood” that race was a factor in some decisions; however, it did not necessitate that “race [enter] into any capital sentencing decisions or that race was a factor in *McCleskey*’s particular case.”<sup>94</sup> The majority felt that the risk of racial discrimination in death penalty sentencing (covered by the Baldus study) did not reach a “constitutionally unacceptable” point.<sup>95</sup> They did not clearly define what they meant by “constitutionally unacceptable point”; instead, they cited a Congressional report to explain the likelihood that racial discrimination could be understood (or interpreted) in a less capricious and constitutionally acceptable manner (in such circumstances).<sup>96</sup> The majority’s interpretation of statistical data suggested that “[the] [a]pparent disparities in sentencing are an inevitable part of our criminal justice

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91. *Id.* at 293-94.

92. *Id.* at 294-97 (the third reason the Court provided was basically the same as the first one, which implicitly argued that the phenomena depicted by the Baldus study was simply the consequence of the inevitable discretion in criminal sentencing).

93. *Id.* at 297-99.

94. *Id.* at 306-08.

95. *Id.* at 309.

96. *Id.* at 308-13.

system”<sup>97</sup> and that precedents have perceived these to be acceptable risks of misuse of discretion in the jury trial system.<sup>98</sup> Nevertheless, statistical data were not completely and explicitly excluded from the Eighth Amendment analysis; however, the risk had to be considered higher than “likelihood” and constitutionally unacceptable--which was completely a vague concept.

### 2. *Illiteracy of Using Numerical Data*

The majority’s rejection of the Baldus study in their Fourteenth Amendment reasoning, associated with the *McCleskey* case, arguably suggested a misuse and misunderstanding of statistical research. The Court could demand that the study show “statistical significance”<sup>99</sup> to confirm that the association between death sentencing and race were not due to chance in *McCleskey*. In fact, the Baldus study had already considered 230 nonracial factors to test the influence of race in sentencing before making its conclusion.<sup>100</sup> Still, the majority failed to acknowledge its proper meaning (i.e., that the case showed a certain illiteracy associated with numerical data).

### 3. *Transition from Quantity Change to Quality Change and Anchoring Effect on Numerical Judgment*

In its Eighth Amendment analysis, the Court evaluated the risk of racial discrimination to be low and constitutionally acceptable, and it also blocked the inferences drawn from a general (statistical) study to the individual case decision. This position implicitly acknowledged, however, that if the outcome of statistical data was more serious than the Baldus study demonstrated (interpreted as “likelihood”), the majority might deem the risk constitutionally “unacceptable” and strike down the sentencing process according to the Eighth Amendment prohibition.

**Table**

	Evidence +	Evidence -
Discrimination +	ad hoc remedy	“(acceptable) risk”
Discrimination -	(N/A)	“death deserved”

Source: Author

97. *Id.* at 312.

98. *Id.* at 311-13.

99. See BEECHER-MONAS, *supra* note 55, at 60-62.

100. *Kemp*, 481 U.S. at 325 (Brennan, J., dissenting).

Table. clearly illustrates the *McClesky* majority's policy proposition on death penalty and racial discrimination: when discrimination takes place in a specific case and evidence (as adjudicative facts) is available, defendant like Mr. McClesky should seek *ad hoc* remedy by presenting such evidence. By contrast, if discrimination does not exist in any sense, death penalty would be constitutional. But if evidence for this specific case is not available, when discrimination exists as a systematic problem and supported by external-knowledge (as legislative facts), the constitutionality would rely on the size of the risk, and death penalty would be unconstitutional when the size of risk is large enough.

Thus, the focus of this essay is where the dotted line locates, which represents the interpretation of the statistical report i.e. the Baldus study. The dotted line is located well above the middle in this Table because the Court interpreted that the racial discrimination was only a "likelihood" which did not warrant an overturning of the whole system. In other words, the dotted line is determined by the delicate analysis and interpretation of the data, which dictates the size of the risk zone, and therefore, the conclusion of the Eighth Amendment analysis and the constitutionality of the death sentencing process of the state Georgia.

The correlation between the risk-zone size and constitutionality judgment is another example of a transition from *quantity* to *quality*. To apply to the scenario of legal decision-making, judges' numerical judgment is critical for determining whether the transition would happen. Myriad scholars have focused on the empirical side of this type of decision-making process. For example, after reviewing multiple psychological studies, Professor Jeffrey J. Rachlinski and his colleagues found that "anchoring has proven to be a robust phenomenon that affects all manner of judgments" (especially when it comes to numbers).<sup>101</sup> The anchoring effect theory suggests that numerical reference points significantly affect numeric judgments (i.e., much more than reasonable estimates).<sup>102</sup> The anchoring effect penetrates the process-related numerical judgments so powerfully that it happens even when reference points were "bizarre"<sup>103</sup> or when such referencing is "normatively indefensible."<sup>104</sup> Moreover, civil law judges (e.g., German and Dutch) are as vulnerable to the anchoring effect as their common-law counterparts (e.g., American and Canadian judges).<sup>105</sup>

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101. Rachlinski, Wistrich & Guthrie, *supra* note 62, at 702.

102. *Id.* at 710.

103. Guthrie, Rachlinski & Wistrich, *supra* note 64, at 1501-06.

104. Rachlinski, Wistrich & Guthrie, *supra* note 62, at 731-32.

105. For the experiment including Dutch, American and Canadian judges, *Id.* at 729-736; and for the experiment included German judges, English, Mussweiler & Strack, *supra* note 66, at 188.

That being said, the anchoring effect is not all bad. Reasonable reference points can be a convenient proxy for making numerical decisions; however, this requires “enough cognitive effort” to adjust.<sup>106</sup> The Rachlinski’s study recommended three ways to minimize the negative influences of the anchoring effect on judges, including (1) prohibition on mentioning figures, (2) exposure to meaningful anchors, or (3) restriction on judges’ discretion.<sup>107</sup> Considering the authoritative role that a constitutional court usually plays in the judiciary, the prohibition on figures and restriction on discretion would be impractical and least desirable. By contrast, multiple studies have suggested that increasing exposure to meaningful anchors seems more feasible—even when anchors are mutually competing.<sup>108</sup> With proper quality control of the figures, the basic reasonableness of the anchors can be maintained.

The majority opinions of *McClesky* and the *J.Y. Interpretation No. 584* drew their numerical lines without reference points (i.e., they did not clearly [or even vaguely] illustrate a transitional line of constitutionality). This contrasts with the TCC case, *J.Y. Interpretation No. 708*; in this case, constitutional reasoning included meaningful and competing reference points. For example, the majority of the TCC decided on a 15-day period as the maximum detention time for illegal immigrants (before their deportations or judicial hearings); with government statistical data cited, the majority set the 15-day cap because “the Agency’s current practice results in around seventy percent of detainees being repatriated within fifteen days.”<sup>109</sup> Justice C. Y. Tsay explicitly mentioned his reference point in his concurring opinion: according to the same data, the Agency could only finish 7% of the deportations within 72 hours,<sup>110</sup> which meant that 93% of the illegal immigrants would be released by choosing the 72-hour alternative; and that was unacceptable to Justice Tsay.<sup>111</sup> A dissenting Justice in *J.Y. Interpretation No. 708* also mentioned during the in-depth interview that he could accept 72 hours<sup>112</sup> because it was the

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106. Tversky & Kahneman, *supra* note 67, at 1124, 1128.

107. Rachlinski, Wistrich & Guthrie, *supra* note 62, at 736-38. The Rachlinski study focused on the amount of civil compensation and criminal sentencing, which are at least as complicated and specific (if not more) than value judgments of constitutionality (insofar as the numerical judgment are involved). Constitutionality judgments here only involve excessiveness, while compensation and sentencing must be both non-excessive and effective. If more complicated (civil and criminal) judgments can be improved through these suggestions, they should be applicable to easier judgments too.

108. *Id.* at 737.

109. *J.Y. Interpretation No. 708*.

110. Although that particular governmental data were flawed because it were partially collected.

111. *J.Y. Interpretation No. 708* (Tsay, J., concurring).

112. He considered this a compromise. The extreme choice can be found in a 24-hour period according to Justice C.S. Li in his dissenting opinion. He made a textual argument according to

maximum period among for the countries that take human rights seriously; but he felt that 15 days was too far from this period.

The divergent choices among the Justices in *J.Y. Interpretation No. 708* serves as a good concluding example of numerical decisions and anchoring effects. Compared with an extreme, 24-hour proposition, most Justices were searching for a transitional line (i.e., when adding another day would become an excessive and constitutionally unacceptable means of achieving the regulatory needs of the administration vis-à-vis illegal immigrants). Sixty days clearly exceeded that transitional line, and most of the Justices came down between the 15-day and 72-hour alternatives. They used different, competing anchors to inform their decisions and justify their propositions. Eventually, a numerical bright-line rule was drawn: a two-thirds majority accepted the balance between a “70% finished rate for cases within 15 days deprivation physical freedom” as a “reasonable working period.”

Here, reference points not only significantly affect numeric decisions; with proper explanation, they also effectively demonstrate how quantity change leads to quality changes and help justify the assessment of the excessiveness of means.

#### B. *Least Infringement Analysis in U.S. Supreme Court*

In some of its doctrines involving constitutional rights cases, the U.S. Supreme Court also requires the means to be a least infringement (as the TCC does). Two high-profile cases are selected here to demonstrate the role of external-knowledge in this doctrinal requirement and the associated challenges. In the case of *Brown v. Entertainment Merchants Ass’n* (2011),<sup>113</sup> the Court struck down a California law that prohibited certain violent videogames from being sold to minors without parental permission. In the other case, *Grutter v. Bollinger* (2003),<sup>114</sup> the Court upheld the admission standard of a Michigan law school, which allegedly violated racial equality (hereinafter, *Grutter*).

##### 1. *Case Briefs of Brown v. Entertainment*

Applying the strict scrutiny test, *Brown v. Entertainment* (*Brown v. Ent.*) was a U.S. Supreme Court case involving separate opinions that caused the Justices to bring up and contemplate choices, among

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Art.8 para 2 of the Constitution.

113. *Brown v. Entertainment Merchants Association*, 131 S.Ct. 2729 (2011)

114. *Grutter v. Bollinger*, 539 U.S. 306 (2003).

alternatives, to determine the means of least infringement.<sup>115</sup> Under the First Amendment protection of free speech, the majority struck down the California law that prohibited certain violent videogames from being sold to minors without parental permission; the violation could lead to a civil fine (up to \$1,000) for the game distributor. The majority cited government reports and wrote that a voluntary rating system had been adopted by the videogame industry, which “outpaces” other industries (e.g., movies and music) and “does much to ensure that minors cannot purchase seriously violent games on their own, and that parents who care about the matter can readily evaluate the games their children bring home.”<sup>116</sup>

As a 7-2 decision, Justice Thomas and Justice Breyer separately rendered their dissenting opinions. While Justice Thomas focused on the “original scope” of the free speech protection,<sup>117</sup> Justice Breyer cited *Reno v. ACLU* (1997)<sup>118</sup> as the source of the standard of review, which required “at least as effective” as the prerequisite before comparing restrictions of the alternatives.<sup>119</sup> Then he cited a governmental report to demonstrate the enforcement gap of a voluntary system, which supported his judgment that a voluntary system was not as effective as the California law in dispute.<sup>120</sup> The majority did not argue the effectiveness of the voluntary system but responded from the normative angle and deemed the enforcement gap to be “unavoidable” in its footnote 9.<sup>121</sup> Nevertheless, Justice Breyer did not compare the infringements of rights among different policies; consequently, no external-knowledge was cited regarding this issue.

## 2. *Case Brief of Grutter v. Bollinger*

*Grutter v. Bollinger* was another example of a disputed provision that was upheld partly because the alternatives were not equally effective. The University of Michigan Law School used race as one factor (among many) in its admission evaluation process to ensure its student body reflected sufficient “diversity” in the environment of the legal education. The U.S. Supreme Court was asked to decide whether this violated the equal

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115. *Entertainment Merchants Association*, 131 S.Ct. at 2738, 2740-41 (opinion of the Court), 2770 (Breyer, J., dissenting).

116. *Id.* at 2740-41.

117. *Id.* at 2751-61 (Thomas, J., dissenting).

118. *Reno v. American Civil Liberties Union*, 521 U.S. 844, 874 (1997).

119. *Entertainment Merchants Association*, 131 S.Ct. at 2770 (Breyer, J., dissenting).

120. *Id.*

121. *Id.* (majority opinion).

protection clause of the Fourteenth Amendment.<sup>122</sup> Like *Brown v. Ent.*, strict scrutiny was applied and “narrow tailoring” was required in this case; thus, the majority examined several different designs for admission standards. Under the narrow tailoring standard, the Court was not required to review “every conceivable” alternative but to engage in a “serious, good faith consideration” of viable alternatives.<sup>123</sup> Eventually, the majority concluded that the alternatives would hinder the school’s ability to maintain the student body’s diversity, academic quality (or both), which led to the majority’s rejection of the least infringement challenge.<sup>124</sup>

The majority reasoning was like Justice Breyer’s dissenting opinion in *Brown v. Ent.*, where both opinions stopped at the “same effectiveness” requirement and did not further compare different infringements among potential means. Nevertheless, another issue raised by Justice Thomas in *Grutter* might look like a comparison of that kind. Justice Thomas’ opinion brought up the potential stigmatization of minorities (if race could be considered as a factor in admission); he suggested that it would outweigh the compelling interest of diversity.<sup>125</sup>

This reasoning, regarding “outweighing,” is similar to the last stage of the least infringement analysis i.e., both kinds of reasoning require a comparison of different values. But research suggested that no social science study specifically focusing on the comparison between this cost (stigmatization) and benefit (future achievement) could be found; in fact, it is a different question from the general assessment of affirmative action (which much research has undertaken).<sup>126</sup> This distinction is also valid here (i.e., the comparison between specific values, which is required by the last step of least infringement analysis, is different from the overall assessment of a policy).

### 3. *Similar Challenges Occur*

The role of external-knowledge in least infringement analysis, associated with U.S. Supreme Court cases, is surprisingly similar to the

122. *Bollinger*, 539 U.S. at 311-17.

123. *Id.* at 339-40. This standard was also applied when the Court reviewed a similar admission standard in college-level education in the later case of *Fisher v. University of Texas at Austin*, 133 S.Ct. 2411, 2420 (2013). But *Fisher* emphasized that “good faith” does not save the disputed provision from “impermissible consideration of race”; the Court still needs to closely review “the evidence of how the process works in practice.” *Id.* at 2421.

124. *Bollinger*, 539 U.S. at 340-42. The majority also decided that the Michigan Law’s standard did not unduly burden the nonminority, but it was not an external-knowledge-based comparison. *Id.* at 341.

125. *Id.* at 349-50, 373 (Thomas, J., concurring in part and dissenting in part).

126. Joshua M. Levine, *Stigma’s Opening: Grutter’s Diversity Interest(s) and the New Calculus for Affirmative Action in Higher Education*, 94 CALIF. L. REV. 457, 516 (2006).

TCC example: external-knowledge is helpful for examining the first requirement [“as effective as”], while it becomes absent in the second requirement examination. As speculated in the earlier section, this situation might suggest that external-knowledge is of no use when it comes to prioritizing different values. This hypothesis is better supported by the two high-profile U.S. cases discussed here. It is safe to assume that with this degree of attention, experts on each side will do their best to offer supportive evidence of all aspects, and Justices will make the best use of it. For example, while Justice Breyer provided an eight-page appendix of research on causality between psychological harm to children and violent videogames,<sup>127</sup> he did not provide an argument or external-knowledge citation to help form an argument about the second requirement.<sup>128</sup> It seems that a similar challenge occurs in this category (of using external-knowledge in constitutional reasoning) in both TCC and U.S. Supreme Court cases.

C. *Legitimacy Debate: Using External-Knowledge to Build Argument and Counterargument*

1. *Building Arguments on Causality/Probability*

For some purposes that are “undoubtedly” worthy of protection, constitutional courts tend to skip an examination of the legitimacy issue and directly examine the causality/probability issue. For example, the legitimacy of protecting minors’ psychological health seems to be an indisputable legislative purpose; in fact, it is so indisputable that Justices with both the TCC and U.S. Supreme Court did not argue about it at all. In *J.Y. Interpretation No. 646*, the dissenting opinion was to challenge whether the operation of those unregistered gambling electronic arcades would cause harm to minors’ psychological health empirically (vs. conceptually or according to common sense). In *Brown v. Ent.*, the Justices (both the majority and dissenters) expanded their debates at length (from the review of the purpose) by substantially appealing to external-knowledge (mostly psychological studies) presented in the case, and they made their own evaluations. Their key questions included: *Did the California government present a compelling interest? Was there a successfully established direct causality between violent videogames and psychological harm to minors?*<sup>129</sup> Although the majority’s final

127. *Entertainment Merchants Association*, 131 S.Ct. at 2772-79 (Breyer, J., dissenting).

128. Justices generally try to win as many arguments as they can, in order to maximize one’s justification of the holding.

129. *Entertainment Merchants Association*, 131 S.Ct. at 2738.

evaluation (again, about choosing causality or correlation) and rejection of external-knowledge may not be scientifically sound,<sup>130</sup> the use of external-knowledge itself helped the Court decide on an empirical basis rather than false presumptions, prejudices, or speculations. When the Court failed to use external-knowledge correctly (e.g., in cases like *Brown v. Ent.*), experts in the area would be able to sense the failure and issue a warning to the arbitrariness of fact-finding.<sup>131</sup>

## 2. *Grutter: A Legitimacy Issue Beyond Causality/Probability*

There are times that the legitimacy of the ends were in question and the answer became difficult to attain in cases like *J.Y. Interpretation No. 644*, in which Justices provided various interpretations of the constitutional text, according to different levels of abstraction, to determine whether the fortified democracy theory (as the legislative purpose) could find its place in the Constitution when constitutional freedoms of political speech and association were at stake. In *Grutter*, an even more difficult task was brought to the U.S. Supreme Court (i.e., determining whether “diversity” was a compelling interest for higher education).<sup>132</sup>

In addition to the normative decision to maintain a deferential attitude toward the law school’s “educational judgment,”<sup>133</sup> the majority substantially reviewed the external-knowledge introduced to the Court to elaborate on how compelling diversity was in higher education. Writing for the majority, Justice O’Connor intensively relied on external-knowledge introduced by the law school, academic research, interest groups (in this case, businesses and the U.S. military), and the U.S. government amicus brief to explain, with sophistication, what diversity could achieve in workplaces (both locally and globally), civil service, governmental leadership, and in the broad context of social and cultural heritage and citizenship.<sup>134</sup>

The direct challenge to the nature and legitimacy of the diversity argument was made in two different ways. Dissenting opinions rendered by Justice Scalia and Justice Thomas relied on no external-knowledge and instead only precedents and logical critiques. Thus, their arguments were formalistic; they proclaimed that since other kinds of “substantial interest”

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130. Frederick Schauer, *Harm(s) and the First Amendment*, 2011 SUP. CT. REV. 81, 91-93 (2011) (who contends that the psychological research cited in the case was not about correlation—the reason Justice Scalia rejected it—but actually on the causality).

131. *Id.* at 91-93, 110-11.

132. *Bollinger*, 539 U.S. at 328.

133. *Id.*

134. *Id.* at 330-33.

(except for national security) did not outweigh the sacrifice of racial equality in other U.S. Supreme Court precedents, diversity/educational interest (as another kind of “substantial interest”) should also be rejected as a constitutionally permissible end.<sup>135</sup> Their approach focused on the consistency of the conceptual meaning and category; however, it failed to explain why the rejection of “best interests of a child”<sup>136</sup> as a legitimate end, could justify the rejection of the disputed standard in this case--except that the former rejection somehow happened earlier that had made it become a precedent to follow.

Chief Justice Rehnquist took a different approach to build up his counterargument.<sup>137</sup> He called the diversity argument’s bluff by citing statistical data and demonstrating that the Michigan law school’s intent (i.e., the ends) was more like a quota (vs. a factor for diversity):

But the correlation between the percentage of the Law School’s pool of applicants who are members of the three minority groups and the percentage of the admitted applicants who are members of these same groups is far too precise to be dismissed as merely the result of the school paying “some attention to [the] numbers” . . . . The tight correlation between the percentage of applicants and admittees of a given race, therefore, must result from careful race based planning by the Law School. . . . Not only do respondents fail to explain this phenomenon, they attempt to obscure it.<sup>138</sup>

This argument cannot be executed without actually reading, citing, and analyzing the data of the admission practice. Moreover, his approach can better reconcile the binding precedent (i.e., *Regents of Univ. of Cal. v. Bakke*), which recognized that racial diversity is acceptable when it is supported by empirical evidence.<sup>139</sup> Justice Rehnquist’s opinion was a direct contestation that constructed the legislative purpose in the opposite way from the majority. By integrating external-knowledge with the same binding precedent in his constitutional reasoning, he pushed the respondent (also the majority, in a sense) to explain the normative meaning-bearing fact (i.e., why the so-called diversity appeared to be a constitutionally forbidden quota system).

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135. *Id.* at 347-48 (Scalia, J., concurring in part, dissenting in part), 352-56 (Thomas, J., concurring in part, dissenting in part).

136. *Id.* at 352-53 (Thomas, J., concurring in part, dissenting in part).

137. As Justice O’Connor recognized, Justice Kennedy’s dissenting opinion was the only one that did not examine the legitimacy end prong and focused solely on narrowly tailored means prong. *Id.* at 321-22 (majority opinion).

138. *Id.* at 383-85 (Rehnquist C., J., dissenting).

139. *Regents of the University of California v. Bakke*, 98 S.Ct. 2733, 2339-40 (1978).

### 3. *Data Interpretation and Examination in Legitimacy Review*

Ultimately, neither the majority nor the respondent seemed to provide a persuasive answer to this troubling phenomenon. Nevertheless, what Justice Rehnquist offered was an intuitive interpretation of the statistical data cited. As discussed earlier (regarding the use of statistical data and its inferences in *McCleskey*), by employing statistical techniques (e.g., checking statistical significances), one may further examine Justice Rehnquist's suspicions of a racial quota. Scholars have pointed out that admission standards pursuing "diversity" will target a "critical mass," which is different from a "quota." The former means "enough variation in experiences both within and across any given racial and ethnic group to both add to the vibrant mix in the learning environment and to enable interactions to occur in which common experiences can form across race and ethnicity"; however, a quota means only an appropriate numerical proportion.<sup>140</sup> With enough understanding of the field of external-knowledge (i.e., social science, in this current context), either the majority or Justice Rehnquist could have proposed a better standard to support (or challenge) each other's presumptions and assertions.

### 4. *The Absence of Counter Research and Its Implications*

Meanwhile, we should also take note of the absence of the counter-diversity research in *Grutter*. None of the dissenting opinions' attacks on the merits of diversity were made with the support of external-knowledge. This phenomenon indirectly suggests that law might be the only kind of knowledge in the social sciences and humanities that has intrinsic doubts about diversity as a legitimate end; humanities and social sciences generally overwhelmingly endorse the legitimacy of affirmative-action projects. This absence not only represents a consensus that diversity should be secured as a legitimate end in affirmative-action cases (which can strongly affect judicial decision-making),<sup>141</sup> it also signifies the extreme difficulty for future direct challenges on diversity as a legitimate end.<sup>142</sup> Under such consensus, legal challenges can be more

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140. Nancy Cantor, *From Grutter to Fisher and beyond: The Compelling Interest of Diversity in Higher Education*, 48 U.S.F. L. REV. 261, 270-71 (2013).

141. Levine, *supra* note 126, at 528 (who cited Justice Stevens' speech to the Chicago Bar Association in which he expressed his serious consideration of the amicus briefs which represented "the accumulated wisdom of the country's leaders" in making his decision in *Grutter*).

142. *Id.* at 526-28. See also, e.g., Robert J. Bliwise, *Re-Affirming Affirmative Action*, DUKE MAG. (Oct. 1, 2003), <http://dukemagazine.duke.edu/issues/091003/action1.html>.

difficult to make without the negative criticism of legalism.<sup>143</sup> Surely legitimacy is not determined by nose counting; however, when all available research leads in the same direction, it would be extremely difficult to argue otherwise.

## VI. CONCLUSION

Constitutional decisions sometimes incorporate information provided by external-knowledge; occasionally, this inclusion is even required in some doctrines. This essay focused primarily on situations involving the use of external-knowledge in constitutional rights cases from the TCC and the U.S. Supreme Court. In either court, constitutional rights cases often involve an assessment of the excessiveness of the means and an evaluation of the legitimacy of the ends. In the cases mentioned in this essay, observations are made on the role external-knowledge played, could have played, and the challenges that interdisciplinary approaches faced in MEA of constitutional right cases.

First and foremost, in both the assessment of the excessiveness of the means and review of the legitimacy of the ends, external-knowledge was primarily used to determine facts i.e., the existence of certain facts and causality and/or correlation between facts. It can help Justices defeat their own factual prejudices and false presumptions. The most common kind of external-knowledge used here was statistical data and research (which involved the interpretation of numeric information). The interpretations can be conflicting between different Justices. However, with a basic understanding of statistics and analytical skills, those conflicts can be effectively reduced; consensus thus, based on facts, can be built accordingly.

One challenge that stood out was the choice between causality and correlation. Judicial decision makers are accustomed to demanding causal evidence for the adjudication of specific cases. Constitutional review of the law, however, is quite different from *ad hoc* adjudication. Moreover, statistical data can present the overall situation that adjudicative facts cannot offer. Thus, Justices of constitutional courts should accept correlational evidence as valid information and refrain from denying the existence of certain facts only because “causal evidence” is not available.

A more difficult challenge presented itself when a conflict occurred in determining the transition from *quantity* to *quality* changes. Although Hegel had laid down a philosophical foundation for such transition, to

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143. The tension between judicial supremacy and popular constitutionalism is somehow analogous to the tension mentioned here. For a brief description, see Frederick Schauer, *Is Legality Political?*, 53 WM. & MARY L. REV. 481, 492-93 (2011).

provide a rationale for drawing a clear numeric line is never easy. Moreover, as psychological studies have identified the anchoring effect, numerical decisions are very likely made under the influence of reference points. In other words, numerical decisions are not only dictated by rationale but by anchoring effects and reference points. Empirical studies made several suggestions on how to enhance the quality of rational numeric decisions, which could be helpful in a practical sense although they are not necessarily an improvement on logic.

Second, as a prong of the assessment of excessiveness of the means, the “least infringement” contains a two-step analysis. External-knowledge can help the first step (i.e., the alternative should be at least as equally effective as the disputed means). In most of the cases selected, analysis stopped here since most alternatives could hardly be equally effective; also, external-knowledge was still useful in determining the effectiveness of various alternatives. After the alternative passed the first step, the second step required the alternative to be a lesser infringement of the original one. External-knowledge was rarely used to address this issue (which involves prioritizing different values) and rendered this step analogous to comparing apples with oranges but without a common measurement (e.g., vitamin C). Hence, unless external-knowledge actually bears normative meaning that is currently undiscovered or unrecognized, this step would be a “no-fly zone” for external-knowledge’s role in constitutional reasoning.

Third, the review of the legitimacy of ends can be categorized into two scenarios. In one situation, when the end itself was presumably legitimate, the review would again focus on the existence and degree of seriousness of such ends (e.g., preventing psychological harm from minors). When legitimacy itself is challenged, there seems to be no single “correct” answer and, thus, various approaches were adopted. But in general, some basic social scientific training and understanding can be very helpful for producing a more sophisticated analysis and attaining a better decision. Another noteworthy phenomenon observed was “the absence of counter research,” which indicated that the legitimacy of certain legislative purposes was recognized by the high consensus (among other intellectual communities). Under such consensus, the legitimacy would not only be immune from external challenge but also more difficult to counter in traditional legal arguments.

Functions, limitations, and other noteworthy features of external-knowledge (used in serving existent constitutional standards) are observed and identified in this essay through case studies. These studies suggest that external-knowledge makes significant contributions to the provision of factual information, although the importance of this

contribution has in general been neglected. Accordingly, most of the challenges relate to *the correctness of understanding*, making inferences, and applying factual information. More importantly, those contributions and challenges of utilizing external-knowledge exist regardless of the differences of the applied legal doctrines or the legal traditions that the TCC and U.S Supreme Court belong. This conclusion suggests that interdisciplinary approaches have some distinctive characteristics that lie at the fundamental and philosophical level, which transcend the separations of jurisdictions and legal traditions. Further inquiry on this subject is worth of deeper investigations.



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# 「法外知識」於目的手段審查之 運用：科際整合憲法論證方法之 臺美比較研究

賈 文 宇

## 摘 要

在基本權案件中，目的手段關聯性分析往往是違憲審查的必備工具。長期以來，此一分析係以文義解釋為核心；但在法律務實主義的影響下，美國聯邦最高法院即在許多案件中採用了科際整合的分析途徑。近年來，臺灣的司法院大法官也有嘗試使用科際整合分析的跡象。本文透過比較臺、美兩國在科際整合途徑上具代表性的憲法案例，突顯此一分析方式超越法系（普通法系／大陸法系）隔閡的、本質上優缺點，呈現科際整合（憲法）法學方法的特殊性。

關鍵詞：憲法、臺灣憲法法院、科際整合法學、法律務實主義、比例原則