

Fordham International Law Journal

Volume 39, Issue 1

2015

Article 3

Soziale Kompetenz: A Comparative Examination of the Social-Cognitive Processes that Underlie Legal Definitions of Mental Competency in the United States, Germany, and Japan

Joseph Alan Wszalek*

*University of Wisconsin Law School

Copyright ©2015 by the authors. *Fordham International Law Journal* is produced by The Berkeley Electronic Press (bepress). <http://ir.lawnet.fordham.edu/ilj>

Soziale Kompetenz: A Comparative Examination of the Social-Cognitive Processes that Underlie Legal Definitions of Mental Competency in the United States, Germany, and Japan

Joseph Alan Wszalek

Abstract

Part I of this Article will examine plain-text selections of legal language concerning mental competency from the constitutions, codes, or relevant decisions by the highest national courts, of three countries: the United States, Germany, and Japan. As three of the biggest economic powers on the planet, these countries merit consideration not just for their contrasting cultural and legal frameworks but also for their relative influence within the international arena during the latter half of the twentieth century. Part I's examination will focus on constitutional and code language for two important reasons: (1) these sources of law form the basis of the country's legal system, and serve as the foundation for other, more specific forms of legislation; (2), as the highest form of the country's primary law, they serve as the legal standard against which all the other laws are evaluated. Next, Part II will examine the relevant language and argue that a certain set of cognitive functions, social-cognitive functions, most likely underlie these strictly legal definitions. Finally, Part III will briefly examine how effectively these definitions convey the prevailing scientific standard and consider what changes, if any, could be made to the current definitions of mental competency in the United States to better reflect both these prevailing scientific standards and the foreign definitions.

KEYWORDS: Germany; Japan; Dusky; Clark; Competency; United States; Cognitive Function; Judgment; Cognititon; International Law

SOZIALE KOMPETENZ: A
COMPARATIVE EXAMINATION
OF THE SOCIAL-COGNITIVE
PROCESSES THAT UNDERLIE
LEGAL DEFINITIONS OF
MENTAL COMPETENCY IN THE
UNITED STATES, GERMANY,
AND JAPAN

Joseph Alan Wszalek

ARTICLE

SOZIALE KOMPETENZ: A COMPARATIVE
EXAMINATION OF THE SOCIAL-COGNITIVE
PROCESSES THAT UNDERLIE LEGAL
DEFINITIONS OF MENTAL COMPETENCY IN THE
UNITED STATES, GERMANY, AND JAPAN

*Joseph Alan Wszalek**

INTRODUCTION	102
I. LEGAL DEFINITIONS OF MENTAL COMPETENCE.....	105
A. The United States.....	106
1. Competency Under <i>Dusky</i>	107
2. Competency Under <i>Clark</i>	108
B. Germany	109
1. Competency Under German Private Law	110
2. Competency Under German Criminal Law	111
C. Japan	113
1. Competency Under Japanese Civil Law	113
2. Competency Under Japanese Criminal Law	114
II. UNDERLYING COGNITIVE FUNCTIONS.....	115
A. Competency as a Function of Social-Cognitive Processes	116
1. Competency as a Function of Context-Driven Cognition.....	116
2. Competency as a Function of Social Moral Judgment.....	120

* JD cum laude, University of Wisconsin Law School; PhD Candidate, Neuroscience and Public Policy Program, University of Wisconsin-Madison. The author would like to thank the following actors for their invaluable help and support: law faculty at the Justus Liebig Universität Gießen, in particular Dr. Prof. Marietta Auer, for their assistance with German sources; Csanád Siklos, University of Wisconsin's Center for European Studies, and University of Wisconsin's Center for German and European Studies, all of whom facilitated financial support; the Communication and Cognition Lab; the Neuroscience and Public Policy Program; and finally, Dr. Lyn Turkstra and Dr. Ron Kalil, for their zealous advocacy.

3. Competency as a Function of Normal Adult Cognition.....	123
III. POTENTIAL IMPROVEMENTS TO THE US	
DEFINITIONS OF COMPETENCY	126
CONCLUSION.....	131

INTRODUCTION

Twenty-first century society has achieved an understanding of the human mind that would have been unthinkable even a decade ago. Revolutionary advances in scientific methods,¹ computational technology,² and medical practices³ have all fueled the production of an overwhelming amount of data about the structure and function of the human brain.⁴ Perhaps of greater significance to the legal context, scientific research has helped us understand the mental processes that underlie social interactions and that allow us to meaningfully engage with others' feelings, emotions, and thoughts.⁵ Scientific inquiry has even begun to explain the biological and psychological bases for conscious thought and experience,⁶ bringing us one step closer to understanding what it truly means to be human. These breakthroughs, which have created many exciting new opportunities for research and scholarship and have inspired a considerable amount of discussion,⁷ are generating increasingly complex profiles of the human mental condition.

1. For an overview of current methods, see MATT CARTER & JENNIFER C. SHIEH, *GUIDE TO RESEARCH TECHNIQUES IN NEUROSCIENCE* XIX (2010).

2. See *Will Technology Deliver for "Big Neuroscience"?*, 10 *NATURE METHODS* 271 (2013); see also Erika Pastrana, *Bring on the Neuro Tools*, 11 *NATURE METHODS* 28 (2014).

3. Reffaella Zanardi et al., *New Perspectives on Techniques for the Clinical Psychiatrist: Brain Stimulation, Chronobiology and Psychiatric Brain Imaging*, 62 *PSYCHIATRY & CLINICAL NEUROSCIENCE* 627 (2008); Edward W. Lempinen, *Advances in Neuroscience Raise Medical Hopes, Social Questions*, 333 *SCI.* 1108 (Aug. 26, 2011).

4. See, e.g., *NEUROSCIENCE* (Dale Purves eds., 4th ed. 2008).

5. For an excellent summary of social cognitive processes, see Ralph Adolphs, *The Social Brain: Neural Basis for Social Knowledge*, 60 *ANN. REV. PSYCHOL.* 693 (2009) [hereinafter Adolphs 2009].

6. Jonathan Smallwood & Jonathan W. Schooler, *The Science of Mind Wandering: Empirically Navigating the Stream of Consciousness*, 66 *ANN. REV. PSYCHOL.* 31.1 (forthcoming 2015); Adrian M. Owen, *Detecting Consciousness: A Unique Role for Neuroimaging*, 64 *ANN. REV. PSYCHOL.* 109 (2013).

7. See, e.g., *THE OXFORD HANDBOOK OF PHILOSOPHY AND NEUROSCIENCE* (John Bickle eds., 2013).

Perhaps unsurprisingly, these scientific developments have caught the attention of legal actors throughout the world. In 2013, US President Barack Obama announced a comprehensive federal research initiative to fund research of the human brain,⁸ with similar initiatives adopted within the European Union,⁹ Japan,¹⁰ and China.¹¹ US Supreme Court decisions on the applicability of severe forms of punishment to young offenders explicitly referenced scientific findings about the behavioral and biological differences between adults and adolescents;¹² these decisions have been cited in numerous academic writings about the new-found role of scientific evidence about the human brain in the court system,¹³ and scholars now debate the potential of science to resolve difficult social and legal questions, such as detecting lies¹⁴ and improving witness memory.¹⁵ Finally, high-profile cases in popular recreational sports¹⁶ and the military¹⁷ have turned the nation's attention towards the profound impacts that injuries to the human brain can have and have stressed the importance of a robust nervous system in healthy, productive lifestyles.¹⁸

8. John Markoff & James Gorman, *Obama to Unveil Initiative to Map the Human Brain*, N.Y. TIMES, April 2, 2013, at A12.

9. James Kanter, *2 Science Projects to Receive Award of 1 Billion Euros*, N.Y. TIMES, Jan. 28, 2013, at A3.

10. David Cyranoski, *Marmosets are Stars of Japan's Ambitious Brain Project*, 514 NATURE 151 (2014).

11. Cai Wenjun, *China to Build "Brain Database,"* XINHUA NEWS, (June 29, 2012, 18:45:18), http://news.xinhuanet.com/english/china/2014-06/29/c_133447030.htm.

12. *Miller v. Alabama*, 132 S.Ct. 2455, 2464–65 n.5 (2012); *Graham v. Florida*, 130 S.Ct. 2011, 2026–27 (2010); *Roper v. Simmons*, 543 U.S. 551, 570 (2005).

13. See, e.g., Owen Jones et al., *Neuroscientists in Court*, 14 NATURE REV. NEUROSCI. 730 (2013); Laurence Steinberg, *The Influence of Neuroscience on US Supreme Court Decisions about Adolescents' Criminal Culpability*, 14 NATURE REV. NEUROSCIENCE 513 (2013).

14. Kamila E. Sip et al., *Detecting Deception: the Scope and Limits*, 12 TRENDS IN COGNITIVE SCI. 48 (2007); Frederick Schauer, *Neuroscience, Lie-Detection, and the Law*, 14 TRENDS IN COGNITIVE SCI. 101 (2010).

15. Daniel L. Schacter & Elizabeth F. Loftus, *Memory and Law: What Can Neuroscience Contribute?*, 16 NATURE NEUROSCIENCE 119 (2013); Joyce W. Lacy & Craig E. L. Stark, *The Neuroscience of Memory: Implications for the Courtroom*, 14 NATURE REV. NEUROSCIENCE 649 (2013).

16. Ken Belson, *Brain Trauma to Affect One in Three Players, N.F.L. Agrees*, N.Y. TIMES, Sept. 12, 2014, at A1.

17. Thom Shanker & Richard A. Oppel Jr., *War's Elite Tough Guys, Hesitant to Seek Healing*, N.Y. TIMES, June 6, 2014, at A1.

18. For a brief glimpse of the profound effects that these disorders can have on both the affected individual and society as a whole, see Barbara Bottalico & Tommaso Bruni, *Post Traumatic Stress Disorder, Neuroscience, and the Law*, 35 INT'L J.L. & PSYCHIATRY 112 (2012); Thomas J. Farrer & Dawson W. Hedges, *Prevalence of Traumatic-Brain Injury in*

Although our scientific understanding still has far to go,¹⁹ our ability to define and pinpoint mental and cognitive states has never been more refined, and it is fundamentally altering the way we view ourselves and our surroundings.

Long before these scientific advances, however, legal systems recognized the need to interpret and describe mental states. From the Justinian Codes of Ancient Rome²⁰ to the laws of Imperial China,²¹ legal systems have been using their own language to create and define concepts related to mental states for at least two millennia. These concepts, such as competency, guilt, intent, and insanity, are critically important in basic legal frameworks, and are a provocative example of how legal systems employ language to define concepts rooted in human cognition. Language relating to “competency,” or “mental competency,” is particularly relevant for three reasons: (1) it generally applies to both criminal and private law; (2) it generally overlaps with concepts of liability and insanity; and (3) it relates directly to our fundamental perceptions about human autonomy and basic human rights.²² It should be apparent that the use of legal language to define mental states can have profound effects on individuals, and now, as our scientific understanding continues to improve, it behooves us to examine our country’s legal language and consider what, if any, improvements could be made. Comparative law presents a unique opportunity to aid such an examination, especially given the global scale of the scientific and legal inquiries.²³ Accordingly, a comparative examination of legal language related to mental competency is essential for an informed understanding of comparable

Incarcerated Groups Compared to the General Population: A Meta-Analysis, 35 *PROGRESS IN NEURO-PSYCHOPHARMACOLOGY & BIOLOGICAL PSYCHIATRY* 390 (2011); Seena Fazel & John Danesh, *Serious Mental Disorder in 23,000 Prisoners: A Systematic Review of 62 Surveys*, 350 *LANCET* 545 (2002).

19. Though far beyond the scope of this article, the statistics behind these research findings are an interesting topic in their own right. See Katherine S. Button et al., *Power Failure: Why Small Sample Size Undermined the Reliability of Neuroscience*, 14 *NATURE REV. NEUROSCIENCE* 365 (2013).

20. Dig. 47.10.3.1 (Ulpian, Ad Edictum 56).

21. Vivien W. Ng, *Homicide and Insanity in Qing China, as reprinted in Scraphs of History: Insane Offenders in Qing*, 5 H. K. J. *PSYCHIATRY* 38, 38 (1995).

22. See, e.g., Michael L. Perlin, *International Human Rights Law and Comparative Mental Health Law: The Universal Factors*, 34 *SYRACUSE J. INT’L L. & COM.* 333, 354-55 (2006); David Kingdon et al., *Protecting the Human Rights of People with Mental Disorder: New Recommendations Emerging from the Council of Europe*, 185 *BRIT. J. PSYCHIATRY* 277, 278 (2005).

23. See *supra* notes 8-11, 21.

language in the United States, and it can educate any attempts to improve these languages in order to better reflect the prevailing scientific and medical standards and to promote and maintain fundamental human dignity.

Part I of this Article will examine plain-text selections of legal language concerning mental competency from the constitutions, codes, or relevant decisions by the highest national courts, of three countries: the United States, Germany, and Japan. As three of the biggest economic powers on the planet,²⁴ these countries merit consideration not just for their contrasting cultural and legal frameworks but also for their relative influence within the international arena during the latter half of the twentieth century. Part I's examination will focus on constitutional and code language for two important reasons: (1) these sources of law form the basis of the country's legal system, and serve as the foundation for other, more specific forms of legislation; (2), as the highest form of the country's primary law, they serve as the legal standard against which all the other laws are evaluated. Next, Part II will examine the relevant language and argue that a certain set of cognitive functions, social-cognitive functions, most likely underlie these strictly legal definitions. Finally, Part III will briefly examine how effectively these definitions convey the prevailing scientific standard and consider what changes, if any, could be made to the current definitions of mental competency in the United States to better reflect both these prevailing scientific standards and the foreign definitions.

I. LEGAL DEFINITIONS OF MENTAL COMPETENCE

As briefly discussed in the Introduction,²⁵ legal concepts of mental competency are generally both an ancient and a fundamental component of legal systems.²⁶ Innate notions of fairness and humanity may underlie the notion that an individual must be mentally competent before he can be subject to the rule of law.²⁷ Despite a

24. WORLD BANK, *World Development Indicators Database*, Sep. 2014, <http://databank.worldbank.org/data/download/GDP.pdf>.

25. *See supra* note 20 and accompanying text.

26. *See supra* note 20 and accompanying text.

27. *Drope v. Missouri*, 420 U.S. 162, 172 (1975) (noting that a requirement of competency is "fundamental to the adversarial process"); *Youtsey v. United States*, 97 F. 937, 940 (6th Cir. 1899) ("It is fundamental that an insane person can neither plead to an arraignment, be subjected to a trial, or, after trial, receive judgment, or, after judgment, undergo punishment."); 4 WILLIAM BLACKSTONE, *COMMENTARIES*, *24 [hereinafter

likely biological basis for these morals-based notions,²⁸ each of the three legal systems has developed a seemingly unique set of language with which it defines mental competence. That being said, however, there is a certain amount of overlap among the linguistic themes within the various legal definitions,²⁹ and these similarities and differences will be important in the comparative analysis.

A. *The United States*

With its common law tradition and relatively old Constitution, the United States offers little in the way of codified or constitutional language related to mental competency.³⁰ Beginning in the 1960s, however, the US Supreme Court started to incorporate the various protections of the Bill of Rights into the Fourteenth Amendment.³¹ The US Supreme Court's review of legal questions salient to due process and criminal procedure rights established legal language at the level of the US Constitution that defined the standard of competency³² and affirmed the notion that common-law notions of competency³³ fall within the due process protections of the Constitution.³⁴ Even though such decisions were (and are)

BLACKSTONE] (noting that the "rule of law" for dealing with "idiots and lunatics" is that "*furiosus furore solum punitur*" [A madman is punished only by madness]); Harvard Law Review Association, Note, *Incompetency to Stand Trial*, 81 HARV. L. REV. 454, 454 (1967).

28. The evidence to support a biological basis in humans for moral and ethical thought and action is by now quite compelling. See Debra Lieberman et al., *Does Morality Have a Biological Basis? An Empirical Test of the Factors Governing Sentiments Relating to Incest*, 270 PROC. FOR ROYAL SOC'Y LONDON 819 (2003); Jorge Moll et al., *The Neural Basis of Human Moral Cognition*, 6 NATURE REV. NEUROSCIENCE 799 (2005); Liane Young et al., *The Neural Basis of the Interaction Between Theory of Mind and Moral Judgment*, 104 PROC. NAT'L ACAD. SCI. 8235 (2007); see also *infra* Part II.A.2.

29. See *infra* Part I.B, C.

30. Ostensibly, the founding fathers would have viewed the legal authority to define competency as falling within the purview of the various states as an application of the so-called police power. See U.S. CONST. amend. X; see also *Chi., Burlington & Quincy Ry. Co. v. Illinois*, 200 U.S. 561, 584 (1906).

31. See generally Akhil Reed Amar, *The Bill of Rights and the Fourteenth Amendment*, 101 YALE L.J. 1193 (1992).

32. *Drope v. Missouri*, 420 U.S. 162, 162 (1975); *Dusky v. United States*, 364 U.S. 402 (1960) (per curiam).

33. See *supra* note 27.

34. *Cooper v. Oklahoma*, 517 U.S. 348 (1996) ("The test for incompetence is also well settled. A defendant may not be put to trial unless he has sufficient present ability to consult with his lawyer with a reasonable degree of rational understanding and a rational as well as factual understanding of the proceedings against him.") (citation omitted); *Medina v. California*, 505 U.S. 437, 439 (1992) ("It is well established that the Due Process Clause of the Fourteenth Amendment prohibits the criminal prosecution of a defendant who is not competent

infrequent,³⁵ they have established specific legal definitions of mental competency for the purposes of the US Constitution's due process protections.

1. Competency Under *Dusky*

The legal language defining mental competency was first developed in *Dusky v. United States*. In determining that the lower court had not properly determined that the defendant was competent to stand trial, the US Supreme Court held that the appropriate test for mental competence was the "sufficient present ability to consult with his lawyer with a reasonable degree of rational understanding" and "a rational as well as factual understanding of the proceedings against him."³⁶ The per curiam opinion is conspicuously short, and contains nothing to hint at the reasoning (scientific or otherwise) that led the Court to unanimously adopt this particular language as the controlling definition of mental competency.³⁷

Despite *Dusky's* brevity, however, subsequent holdings have expounded its definition of mental competency. When the US Supreme Court reaffirmed the *Dusky* language in *Godinez v. Moran*,³⁸ it provided some additional clarification of its competency definition. Noting that "the crucial component of the [*Dusky*] inquiry is the defendant's possession of a reasonable degree of rational understanding," the Court explained that this definition of mental competency refers to "a particular level of mental functioning, which the ability to consult counsel helps identify."³⁹ The Court also suggested that "rational understanding" is synonymous with the ability to make "reasoned choices."⁴⁰ When the Court again reaffirmed the *Dusky* language in *Cooper v. Oklahoma*,⁴¹ it

to stand trial."); *Pate v. Robinson*, 383 U.S. 375, 378 (1966) ("The State concedes that the conviction of an accused person while he is legally incompetent violates due process.").

35. In the latter half of the twentieth century, the Court averaged two decisions on the subject of criminal mental health law per decade. Christopher Slobogin, *The Supreme Court's Recent Criminal Mental Health Cases: Rulings of Questionable Competence*, 22 CRIM. JUST. 8, 8 (2007).

36. *Dusky v. United States*, 364 U.S. 402, 402 (1960).

37. Legal scholars have noted the opinion's absence of justification. See Robert F. Schopp, *Involuntary Treatment and Competence to Proceed in the Criminal Process: Capital and Noncapital Cases*, 24 BEHAV. SCI. & L. 495, 497 (2006).

38. *Godinez v. Moran*, 509 U.S. 389, 396 (1993).

39. *Id.* at 404 (Kennedy, J., concurring).

40. *Id.* at 397.

41. *Cooper v. Oklahoma*, 517 U.S. 348, 354 (1996).

emphasized the role that the “ability to consult with his lawyer” plays in determining a defendant’s competency. The Court indicated that the ability to “communicate effectively with counsel” is necessary to exercise rights deemed essential to a fair trial, and, more fundamentally, to the basic fairness of the trial itself.⁴² Though these subsequent decisions have created a more complex legal definition of mental competency, the *Dusky* language remains the basic standard for mental competency under the due process protections of the US Constitution.

2. Competency Under *Clark*

Legal definitions of insanity offer a parallel set of definitions of mental competency under the due process rights of the US Constitution.⁴³ Unlike the *Dusky* language, however, the US Supreme Court has not created or affirmed a specific legal definition of insanity for the purposes of due process. Quite the contrary, in *Clark v. Arizona*, the Court instead held that the Constitution “imposes no single canonical formulation of legal insanity.”⁴⁴ Consequently, each of the fifty states imposes its own legal standard, resulting in a patchwork distribution of legal language used to define insanity.⁴⁵

These standards are not fully disparate, however: four major themes underlie the legal definitions of insanity within the United States as discussed in *Clark*. According to the US Supreme Court, these themes are “the cognitive incapacity, the moral incapacity, the volitional incapacity, and the product-of-mental-illness tests.”⁴⁶ The first two themes are a product of the so-called *M’Naghten* rule, named after the English case in which the rule was first described.⁴⁷ These two standards preclude a defendant from criminal culpability either if he suffers from a mental disease or defect as not to know the nature and quality of the act (cognitive incapacity) or if he suffers from a mental disease or defect as not to know that the act was wrong (moral incapacity).⁴⁸ The third theme, volitional incapacity, precludes a defendant from culpability if he was so lacking in volition due to a

42. *Id.* at 364.

43. Historically, there might not have been a clear distinction between general mental incompetence and insanity. See BLACKSTONE, *supra* note 27.

44. *Clark v. Arizona*, 548 U.S. 735, 753 (2006).

45. *Id.* at 750-52.

46. *Id.* at 749.

47. *M’Naghten’s Case*, 8 Eng. Rep. 718, 10 Cl. & Fin. 200 (1843).

48. *Clark*, 548 U.S. at 747-48 (citations omitted).

mental defect or illness that he was unable to control his own actions.⁴⁹ The final theme precludes a defendant from criminal liability if his action was the product of a mental illness or deficit.⁵⁰ Moral incapacity, whether alone or in conjunction with another theme, is the most frequent standard in insanity laws.⁵¹ These *Clark* tests, then, require a two-pronged analysis. First, there must be a “mental disease or defect,” and second, there must be the moral, volitional, or cognitive incapacity.⁵² Even though none of the four tests creates a controlling definition of insanity for the purposes of the US Constitution’s due process protections, they will serve as a suitable proxy for official constitutional definitions.

It is important to note at this point that these insanity standards are a different type of legal definition for mental competency than the *Dusky* standard. *Dusky* defines mental competency in a positive sense (i.e., by the presence of certain abilities or characteristics – namely, the ability to consult with counsel and the ability to understand the proceedings). The *Clark* standards, on the other hand, define mental competency in a negative sense (i.e., by the absence of certain abilities or characteristics – namely, the inability to recognize right from wrong).⁵³ While this distinction may appear trivial, it will become more important in subsequent analysis. In conclusion, the US Supreme Court has affirmed certain definitions of mental competency for the purposes of the US Constitution’s due process protections, definitions which describe mental competency strictly within a legal context.

B. Germany

With its civil law tradition⁵⁴ and extensive codifications,⁵⁵ German’s national laws present a somewhat more accessible sample

49. *Id.* at 749.

50. *Id.* at 749-50.

51. By the Supreme Court’s calculations, forty-four States and the federal government use the moral incapacity test in their insanity statutes. *Id.* at 750-51.

52. *Id.* at 749-50.

53. This distinction should not be confused with the (more common) distinction between positive rights and negative rights, which concerns the presence or absence of affirmative legal duties. See David P. Currie, *Positive and Negative Constitutional Rights*, 53 U. CHI. L. REV. 864 (1986).

54. See GERHARD ROBBERS, AN INTRODUCTION TO GERMAN LAW 15-27 (4th ed. 2006); see also Reinhard Zimmermann, *An Introduction to German Legal Culture*, INTRODUCTION TO GERMAN LAW 1 (Werner F. Ebke & Matthew W. Finkin, eds., 1996).

of legal language with which it defines mental competency in legal contexts. To a certain extent, the codified language may permit a less ambiguous examination of the legal definitions of mental competency, and they are compelling definitions both in their own right and as a counterpart to the legal definitions used within the United States.

1. Competency Under German Private Law

The German Civil Code (Bürgerliches Gesetzbuch, or “BGB”) contains legal definitions of competency that form the basis of mental competency descriptions throughout German private substantive law. The first such definition is the concept of “*Geschäftsunfähigkeit*,” or incapacity to contract.⁵⁶ Section 104 of the BGB defines incapacity to contract as “a state of pathological mental disturbance which prevents the free exercise of will, unless the state is by its nature a temporary one.”⁵⁷ Like the United States’ various definitions of insanity,⁵⁸ the BGB’s definition of mental competency is a negative one, so that mental competency is defined not by the presence but by the absence of certain abilities (i.e., the ability to freely exercise one’s will).⁵⁹

This definition is repeated verbatim in two subsequent sections of the BGB. Section 827, which defines loss and reduction of legal liability in tort,⁶⁰ states that a person is not liable for damages if he is “in a state of pathological mental disturbance precluding free exercise of will.”⁶¹ The identical language⁶² helps effect a more consistent

55. See generally TRADITION, CODIFICATION AND UNIFICATION: COMPARATIVE-HISTORICAL ESSAYS ON DEVELOPMENTS IN THE CIVIL LAW (J.M. Milo et al. eds. 2014).

56. BÜRGERLICHES GESTZBUCH [BGB] [CIVIL CODE], BUNDESGESETZBLATT [BGBl.], as amended, § 104, para. 2, translation at http://www.gesetze-im-internet.de/englisch_bgb/index.html (Ger.) [hereinafter BGB].

57. *Id.* para. 2. For the purposes of consistency, all English translations of the codified laws are taken from the English versions provided by the German Ministry of Justice, unless otherwise noted.

58. See *supra* Part I.A.2.

59. Official commentaries to the BGB define “capacity to contract” (*Geschäftsfähigkeit*), in the positive sense, as “the ability to be able to make generally permissible legal transactions independently and fully effectively,” MÜNCHENER KOMMENTAR, ZUM BÜRGERLICHEN GESETZBUCH, 1222 (Mathias Habersack eds., 6th ed. 2013), or “the ability to independently and fully effectively make legal transactions,” PALANDT, BÜRGERLICHES GESETZBUCH, 82 (C.H. Beck München ed., 72nd ed. 2013).

60. Commentaries call this legal liability “*Deliktsfähigkeit*,” “*Verschuldensfähigkeit*,” or “*Zurechnungsfähigkeit*.” MÜNCHENER KOMMENTAR, *supra* note 59, at 2370; PALANDT, *supra* note 59, at 1381.

61. BGB, *supra* note 56, § 827.

legal definition within the German private law context. Finally, section 1304 further reinforces this definition of mental competency in the context of family law, stating that “a person who is incapable of contracting may not enter into a marriage.”⁶³ These three provisions of the BGB establish a consistent and specific legal definition of mental competency within the sphere of German private substantive law.

In the realm of German private procedural law, the German Code of Civil Procedure (“Zivilprozessordnung”, or “ZPO”) ties mental competency back to the definition established in the BGB. Section 52 of the ZPO defines procedural competency (“*Prozessfähigkeit*”):⁶⁴ “A person shall have the capacity to sue or be sued insofar as he can be obligated by agreements.”⁶⁵ Although it is interesting to note the different phrasing, especially since the related provisions of the BGB (§§ 104, 827, 1304) all use language that is more or less identical,⁶⁶ commentaries indicate that mental competency in the procedural context overlaps with mental competency in the substantive private law context.⁶⁷ By relying on the BGB’s definitions of mental competency, the ZPO reinforces a specific legal definition of mental competency within the German private law.

2. Competency Under German Criminal Law

Unlike US criminal law, German substantive criminal law (Strafgesetzbuch, or “StGB”) contains codified language to define mental capacity within the criminal law context.⁶⁸ First, Section 20 of the StGB creates an exemption from criminal liability, or

62. The subtle difference in the English phrasing is a translation artifact. In the original German, both sections use identical language (“*einem die freie Willensbestimmung ausschließenden Zustand krankhafter Störung der Geistestätigkeit*”) to describe the absence of legal competency. BGB, *supra* note 56, §§ 104, 827.

63. BGB, *supra* note 56, § 1304.

64. ZIVILPROZESSORDNUNG [ZPO] [CODE OF CIVIL PROCEDURE], as amended, § 52, *translation at* http://www.gesetze-im-internet.de/englisch_zpo/code_of_civil_procedure.pdf (Ger.) [hereinafter ZPO].

65. *Id.*

66. *See supra* note 62 and accompanying text.

67. “Procedural competency is procedural capacity to contract” (“*Prozessfähigkeit ist die prozessuale Geschäftsfähigkeit*”), BECK’SCHES KURZ KOMMENTARE, 135 (C.H. Beck München eds., 50th ed. 1992).

68. STRAFGESTZBUCH [StGB] [PENAL CODE], as amended, § 20, *translation at* http://www.gesetze-im-internet.de/englisch_stgb/ (Ger.) [hereinafter StGB].

“*Schuldunfähigkeit*.” Section 20 indicates “any person who at the time of the commission of the offence is incapable of appreciating the unlawfulness of their actions or of acting in accordance with any such appreciation due to a pathological mental disorder, a profound conscious disorder, debility, or any other serious mental abnormality.”⁶⁹ As was the case for the *Clark* tests in the United States, the language in Section 20 requires a two-pronged analysis in order to determine mental competency in the case of insanity.⁷⁰ First, there must be one of the four listed psychopathologies.⁷¹ If the first prong is met, then there must be a finding that, because of the psychopathology, the individual could not appreciate the unlawfulness of the act or could not control his own actions.⁷² Finally, note that, like the BGB’s definition of mental competency, the definition in Section 20 is a negative definition of mental competency, so that competency is described by the absence of the various mental capabilities described within the code.⁷³ This definition forms the basis not just of complete exculpation but also of partial exculpation as well. Section 21 of the StGB notes that a person may be eligible for reduced culpability if his capacity to appreciate the unlawfulness of his actions or to act in accordance with the appreciation is substantially diminished by one of the reasons listed in Section 20.⁷⁴ Because the definition established in Section 20 is repeated in Section 21,⁷⁵ the StGB suggests that the distinction between full mental incompetency and partial mental incompetency is a quantitative one, not a qualitative one, and that the two are on the same spectrum of mental abilities.

Despite the similarity between the definitions of mental competency in German private and criminal law, note that there is one

69. *Id.* § 20.

70. “The § 20 determination is built on two parts.” ROXIN, *STRAFRECHT*, 886(1), (C.H. Beck München eds., 4th ed. 2006).

71. *Id.* For a more detailed description of the four psychopathologies, *see id.* at 889(II).

72. *Id.* at 886(1); *see also* *Clark v. Arizona*, 548 U.S. 735, 749 (2006). These converging definitions are not entirely surprising, given that the sort of mental disorders described in both are universal human phenomena. However, it is interesting that the German and American definitions are so similar even though up until the mid-twentieth century, German criminal law had relatively little influence on the development of criminal law in common law countries. Markus Dirk Dubber, *Theories of Crime and Punishment in German Criminal Law*, 53 *AM. J. COMP. L.* 679, 679 (2005).

73. StGB, *supra* note 68, § 20.

74. *Id.* § 21.

75. *Id.* §§ 20-21. The phrase “das Unrecht der Tat einzusehen oder nach dieser Einsicht zu handeln” appears in both sections.

important difference. In the criminal context, competency can be precluded not only by the “pathological mental disorder” but also by the other three pathologies,⁷⁶ whereas in the private law context, competency can be precluded only by “a state of pathological mental disturbance.”⁷⁷ Ostensibly, then, mental competency in the criminal context is a more difficult standard to meet, as it could be precluded not just by a pathological mental disorder but also by mental conditions that are technically not pathological, such as a low I.Q.⁷⁸ In summation, German private and criminal codes have specific legal definitions for mental competency that both compare and contrast to the definitions in the United States.

C. Japan

Heavily influenced by both US and German legal philosophies and practices, modern Japanese law is something of a hybrid between the US common law and German civil law traditions.⁷⁹ However, the Japanese legal system retains a strong commitment to traditional cultural notions, creating a unique societal context in which these laws are enforced. It is against this backdrop that this Article examines Japan’s legal language of mental competency.

1. Competency Under Japanese Civil Law

In the civil law context, the Japanese civil code (民法, “Minpō”) contains language that creates a specific legal definition of mental competency. Article 713 of the Minpō states that a person is not liable for civil damages if he causes those damages “while he/she lacks the capacity to appreciate his/her liability for his/her own act due to mental disability.”⁸⁰ This language is reminiscent of both the German and the American equivalents. First, the wording suggests a two-step inquiry as was seen in both the German StGB⁸¹ and the US *Clark*⁸²

76. *Id.* § 21.

77. BGB, *supra* note 56, § 104.

78. The word translated as “debility” in section 21 of the StGB, “*Schwachsinn*,” literally means “imbecility” or “idiocy.” As used in section 21, the term signifies “an innate intellectual deficit without an apparent cause.” ROXHIN, *supra* note 70, at 896(22).

79. Elliot J. Hahn, *An Overview of the Japanese Legal System*, 5 NW. J. INT’L L. & BUS. 517, 521-22 (1983).

80. MINPŌ [MINPŌ] [Civ. C.] 1896, art. 713 (Japan), *translation at* <http://www.moj.go.jp/content/000056024.pdf>. All English translations of the Japanese codes are taken from the English versions promulgated by the Japanese Ministry of Justice.

81. StGB, *supra* note 68, § 20.

standards for determining criminal culpability. Second, the phrasing of this standard suggests a variant of the “moral incapacity” test,⁸³ a condition for mental competency that appears in both the US⁸⁴ and the German⁸⁵ definitions of mental competency as well. Interestingly, however, whereas the United States and Germany use moral incapacity to define mental competency in the criminal context, Article 713 employs the moral incapacity standard within the civil law context.

2. Competency Under Japanese Criminal Law

The Japanese criminal codes also contain legal definitions for mental competency. Article 39 of the penal code (刑法, “Keihō”) defines mental competency for the purposes of exculpation: “An act of insanity is not punishable.”⁸⁶ Similarly, “an act of diminished capacity shall lead to the punishment being reduced.”⁸⁷ This language is interesting because, unlike the German and US equivalents, it does not specify what sort of behavior or deficits indicate legal insanity or inculpability. Whereas both German and US criminal law generally define mental incapacity as the inability to control or appreciate one’s behavior due to a mental pathology,⁸⁸ the Keihō simply states that mental incapacity is the state of being insane.⁸⁹ Relatedly, whereas German criminal law defines full legal incapacity and diminished legal capacity with the same legal language,⁹⁰ the Keihō creates a separate, although related, definition for partial mental incapacity altogether.⁹¹

The language put forth in the Keihō is repeated in the Japanese code of criminal procedure (刑事訴訟法, “Keisōhō”)⁹² in three separate procedural contexts, and this repetition helps clarify the language’s meaning by providing greater context. First, Article 314 of

82. *Clark v. Arizona*, 548 U.S. 735, 747-48 (2006) (citations omitted).

83. *Id.* at 747-48; StGB, *supra* note 68, § 20.

84. *Clark*, 548 U.S. at 747-48.

85. StGB, *supra* note 68, § 20.

86. KEIHŌ [KEIHŌ] [Pen. C.] 1907, art. 39, para. 1.

87. *Id.* para. 2.

88. *Clark*, 548 U.S. at 747-48 (citations omitted); StGB, *supra* note 68, § 20.

89. 心神喪失 (*shinshinsōshitsu*), “unsound mind.” KEIHŌ, *supra* note 86, para. 1.

90. *See supra* note 75 and accompanying text.

91. 心神耗弱 (*shinshinmōjaku*), “weakened or diminished mind.” KEIHŌ, *supra* note 86, para. 2.

92. KEIJI SOSHŌHŌ [KEISŌHŌ] [C. Crim. Pro.] 1948.

the Keisōhō establishes that insane individuals cannot be prosecuted, indicating that “when the accused is in a state of insanity,⁹³ the proceedings shall be suspended while the accused is in such a state.”⁹⁴ Second, Article 37-4 establishes that insane individuals or individuals with diminished mental capacity may have lawyers assigned to them.⁹⁵ Finally, Article 439, which concerns the request of a retrial, indicates that a retrial may be requested by “the spouse, lineal relative, brother, or sister of the person who has been found guilty, in the event that said person is deceased or is in a state of insanity.”⁹⁶ The specific repetition of the Keihō’s definition of insanity suggests a more unified legal conceptualization of mental competency, and is a compelling counterexample to the German and US definitions, in which varying language is used for different legal contexts.

II. UNDERLYING COGNITIVE FUNCTIONS

While the legal definitions of mental competency examined in Part I are purely legal constructs,⁹⁷ the people who are adjudicated (and who adjudicate) under them are not; consequently, the legal definitions are fundamentally tied to the cognitive functions with which humans act and interact, and to scientific and medical information about these functions.⁹⁸ It should be possible, therefore, to define a certain set of scientifically recognized cognitive functions

93. 心神喪失の状態 (*shishishōshitsu no jōtai*), “a state of insanity.” *Id.* art. 314, para. 1. Note that the word for insanity is identical to that used in the Keihō. *See supra* note 89.

94. KEISŌHŌ, *supra* note 92, art. 314, para. 1.

95. *Id.* art. 37-4.

96. *Id.* art. 439(1)(iv).

97. *See, e.g.,* Mae C. Quinn, *Reconceptualizing Competence: An Appeal*, 66 WASH. & LEE L. REV. 259, 265 (2009) (“Notably, while seemingly straightforward and rooted in common sense, neither prong of the [*Dusky*] test finds its genesis in medical or mental health literature.”); *Incompetency to Stand Trial*, *supra* note 27, at 470 (“Like criminal responsibility, incompetency is a legal question; the ultimate responsibility for its determination must rest in a judicial rather than a medical authority.”).

98. *See* *Medina v. California*, 505 U.S. 437, 465 (1992) (“Although competency is a legal issue ultimately determined by the courts, recommendations by mental health professionals exert tremendous influence on judicial determinations.”) (Blackmun, J., dissenting); *Incompetency to Stand Trial*, *supra* note 27, at 469 (“In most jurisdictions, reliance on psychiatric testimony is substantial.”); for a somewhat stronger critique, *see* Gerald T. Bennet & Arthur F. Sullwold, *Competence to Proceed: A Functional and Context-Determinative Decision*, 29 J. FORENSIC SCI. 1119, 1120 (1984) (“Uncritical acceptance of the undefined role of the expert has led the legal system to abdication of the traditional judicial decision-making function, supplanting that task by almost total reliance on and ‘rubber stamping’ of those opinions.”).

that underlie these legal definitions. Part II will reconsider the legal definitions of mental competency in the context of these underlying cognitive functions and will suggest a number of social-cognitive elements that are consistent throughout the three countries' various legal definitions.

A. Competency as a Function of Social-Cognitive Processes

Ultimately, the legal definitions of mental competency require the presence of certain mental abilities that allow for functional participation within the social context of a legal proceeding.⁹⁹ The scientific community has characterized these mental abilities into a suite of cognitive functions known as social cognition.¹⁰⁰ Comprising the neuropsychological skill set to recognize and manipulate socially relevant information,¹⁰¹ social cognition is inherently necessary for any meaningful participation in a social context. As the language of the various legal definitions of mental competency suggests, social-cognitive function is key to a finding of mental competency.

1. Competency as a Function of Context-Driven Cognition

The first indication that social-cognitive functions underlie legal competency is the context-based nature of mental competency. In ordinary usage, competence is the state of being functionally adequate or of having sufficient skill.¹⁰² In broader legal usage, competence is the mental ability to understand problems and make decisions or, more broadly, a basic or minimal ability to do something.¹⁰³ Competency, therefore, varies based on the particular legal purpose and depends on contextual factors such as the relative interests at

99. *Drope v. Missouri*, 420 U.S. 162, 171 (1975) (noting that a person who is not mentally competent is someone “whose mental condition is such that he lacks the capacity to understand the nature and object of the proceedings against him, to consult with counsel, and to assist in preparing his defense may not be subjected to a trial”); *Dusky v. United States*, 362 U.S. 402, 402 (1960) (holding that a person who is mentally competent “has sufficient present ability to consult with his lawyer with a reasonable degree of rational understanding—and whether he has a rational as well as factual understanding of the proceedings against him”); *Incompetency to Stand Trial*, *supra* note 27, at 457 (noting that the “primary purpose of the incompetency rule is to safeguard the accuracy of adjudication”).

100. See Adolphs 2009, *supra* note 5.

101. See Ralph Adolphs, *The Neurobiology of Social Cognition*, 11 CURRENT OPINION IN NEUROBIOLOGY 231, 231 (2001) [hereinafter Adolphs 2001].

102. *Competence*, WEBSTER'S NEW INT'L DICTIONARY 463 (3d ed. 2002).

103. *Competence*, BLACK'S LAW DICTIONARY (10th ed. 2009).

stake and the circumstances of the proceedings.¹⁰⁴ As suggested by the US Supreme Court, “[t]here are, of course, no fixed or immutable signs which invariably indicate [competency]: the question is often a difficult one in which a wide range of manifestations and subtle nuances are implicated.”¹⁰⁵ This context-based approach to competency implies not only a flexible legal standard but also a focus on the pragmatic, outcome-driven nature of a defendant’s participation in legal proceedings.¹⁰⁶ Social-cognitive functions are equally context-specific and recruit both conscious and subconscious processes to integrate external stimuli and internal intentions, thereby facilitating social behavior:

Social behavior depends critically on context and intention, a sensitivity that arises from the rich interplay between controlled and automatic processing of social information, and a modulation long emphasized within social psychology. One way of viewing such modulations is to think of an initial feed-forward sweep of social information processing that is rapid and automatic, followed by cycles of additional processing that are biased by the first, but modulated by top-down effects that may incorporate controlled processing and conscious intent.¹⁰⁷

Social cognition’s ultimate role, then, is to “modulate” socially appropriate behavior by integrating socially relevant information with the other, domain-general cognitive abilities¹⁰⁸ necessary to produce

104. Robert F. Schopp, *Wake Up and Die Right: The Rationale, Standard, and Jurisprudential Significance of the Competency to Face Execution Requirement*, 51 LA. L. REV. 95, 1038-39 (1991); Alec Buchanan, *Competency to Stand Trial and the Seriousness of the Charge*, 34 J. AM. ACAD. PSYCHIATRY & L. 458, 459 (2006); Bennet, *supra* note 98, at 1121.

105. *Drope v. Missouri*, 420 U.S. 162, 180 (1975).

106. “A determination of competence or incompetence is functional in nature, context-dependent and pragmatic in orientation” A.B.A., CRIM. JUST. MENTAL HEALTH STANDARDS 175 (1989), http://www.americanbar.org/content/dam/aba/publications/criminal_justice_standards/mental_health_complete.authcheckdam.pdf; *see also* Richard J. Bonnie, *The Competence of Criminal Defendants with Mental Retardation to Participate in Their Own Defense*, 81 J. CRIM. L. & CRIMINOLOGY 419, 424 (1990).

107. Adolphs 2009, *supra* note 5, at 707; *see also* Jonathan St. B. T. Evans, *Dual-Processing Accounts of Reasoning, Judgment, and Social Cognition*, 59 ANN. REV. PSYCHOL. 255, 268-70 (2008). Note that, as Evans points out, an increasing number of models have been developed to represent the social cognitive processes.

108. Domain-general cognitive functions are functions that are used for all cognitive tasks, regardless of context. Attention and working memory are examples of domain-general cognitive functions. *See, e.g.*, Jeremy R. Gray et al., *Neural Mechanisms of Fluid Intelligence*, 6 NATURE NEUROSCIENCE 316, 316 (2003).

intentional, socially relevant action.¹⁰⁹ Therefore, social-cognitive function is critical to the interaction between socially contextual information and intentional actions that underlies mental competency.

This social-cognitive interaction between context and intention is clearly inherent within the various legal definitions of mental competency.¹¹⁰ Under the US *Dusky* standard, a competent individual must possess both a rational and a factual understanding of the proceedings.¹¹¹ In order to do so, the individual's cognitive functions must allow him to perceive the necessary contextual information (i.e., the factual understanding), and to incorporate his conscious thoughts into that information so that he can navigate the proceedings in a meaningful way (i.e., the rational understanding).¹¹² This inference finds additional support in the US Supreme Court's characterization of *Dusky's* "rational understanding" as the ability to make "reasoned choices."¹¹³ One of the defining tasks of the social cognition pathway

109. Social cognition provides "input" to these domain-general cognitive processes, and social behavior is the "output." See Adolphs 2001, *supra* note 101, at 232 (illustrating social cognition's role of processing stimulus input and producing behavior output); for a more detailed discussion about the ability to dissociate social cognition from other cognitive functions, see *infra* Part II.A.2.

110. This interaction between context and intent characterizes the fundamental notions of the legal system itself. See Adolphs 2009, *supra* note 5, at 708 ("The way in which our laws assign blame and dole out punishment also captures an important context effect: an interaction between the harmful consequences of an action, and the belief and intention of the person carrying it out.").

111. *Dusky v. United States*, 362 U.S. 402, 402 (1960).

112. "The weighting of personal experience ('individual information') against information provided from others ('social information') is a key determinant of human decision making, and numerous factors can determine this weighing, such as the predictability of the environment, the relative costs of social and individual information, or the availability of suitable models to learn from. Frequently, individual and social information will together determine a decision." Simon M. Reader & Ionnis Leris, *What Shapes Social Decision Making?*, 37 *BEHAV. & BRAIN SCI.* 63, 96 (2014).

113. "How this [reasoned choice] standard is different from (much less higher than) the *Dusky* standard – whether the defendant has a 'rational understanding' of the proceedings – is not readily apparent to us." *Godinez v. Moran*, 509 U.S. 389, 397 (1993). The Court when on to note that "even assuming that there is some meaningful distinction between the capacity for 'reasoned choice' and a 'rational understanding' of the proceedings," the two standards would have the same legal standard of pleading. *Id.* at 398; see also Schopp, *supra* note 104, at 1044 ("While the capacity to reason or to deliberate are not explicitly stated, the rationale implies that these are also necessary at least to some minimal degree."); Bennet and Sullwold, *supra* note 98, at 1121 (explaining that mental competency "encompasses, at least in part, the mental ability to make a reasoned choice among alternatives").

is the ability to make reasoned choices,¹¹⁴ to “process multiple alternatives and to choose an optimal course of action.”¹¹⁵ In the complex social environment of a legal proceeding,¹¹⁶ therefore, it is all but certain that the *Dusky* standard of competency envisions these social cognitive abilities within its strictly legal definition.

Under the definitions in Germany’s BGB, competency, or “*Geschäftsfähigkeit*,” is the ability to exercise free will¹¹⁷ such that an individual can be bound by a legal transaction.¹¹⁸ Here, the context-driven interaction between individual information and social information is necessarily applicable,¹¹⁹ because the individual must be able to balance various internal and external factors in the process of deciding whether to be freely bound by a transaction.¹²⁰ Therefore, the German BGB could imply an additional subset of social-cognitive functions specifically necessary to complete social transactions (i.e., a contract). Researchers have suggested that these sorts of social interactions rely on a unique set of social-cognitive processes, which may be tightly coupled with the cognitive processes used in other social situations.¹²¹ Certainly German private law’s emphasis on the

114. Alan G. Sanfey, *Social Decision-Making: Insights from Game Theory and Neuroscience*, 318 *SCI.* 598, 598 (2007); Tania Singer, *The Past, Present and Future of Social Neuroscience: A European Perspective*, 61 *NEUROIMAGE* 437, 442-43 (2012).

115. James K. Rilling & Alan G. Sanfey, *The Neuroscience of Social Decision-Making*, 62 *ANN. REV. PSYCHOL.* 23, 24 (2011).

116. *See id.* (“[G]iven that we live in highly complex social environments, many of our most important decisions are made in the context of social interactions.”); *see also* Reader & Leris, *supra* note 112 (“Important decisions in particular are likely to involve substantial use of both individual and social information.”).

117. BGB, *supra* note 56, § 104.

118. MÜNCHENER KOMMENTAR, *supra* note 59; PALANDT, *supra* note 59.

119. Adolphs 2009, *supra* note 5, at 707; Evans, *supra* note 107.

120. Adolphs 2009, *supra* note 5, at 707; Evans, *supra* note 107; Reader & Leris, *supra* note 112.

121. For an experimental consideration of various theories describing the domain-specific cognitive processes underlying social contracts, *see* Gerd Gigerenzer & Klaus Hug, *Domain-Specific Reasoning: Social Contracts, Cheating, and Perspective Change*, 43 *COGNITION* 127 (1992); *see also* Leda Cosmides & John Tooby, *Social Exchange: The Evolutionary Design of a Neurocognitive System*, in *THE NEW COGNITIVE NEUROSCIENCE*, III 1295, 1305 (Michael S. Gazzaniga ed., 2005) (suggesting that “[t]he evidence strongly supports the claim that reasoning about social exchange is caused by computational machinery that is specialized for this function in adults”); Leda Cosmides & John Tooby, *Neurocognitive Adaptations Designed for Social Exchange*, in *THE HANDBOOK OF EVOLUTIONARY PSYCHOLOGY* 584, 587 (D. M. Buss ed., 2005) (arguing that “[t]aken together, the data showing design specificity, precocious development, cross-cultural universality, and neural dissociability implicate the existence of an evolved, species-typical neurocomputational specialization.”).

transactional nature of mental competency suggests that the ability to conclude legal contracts is uniquely important in that valid participation in the private legal system is predicated upon it.¹²² Therefore, the definitions of mental competency in German private law require not just context-driven social-cognitive functions, but also context-driven social-cognitive functions necessary for completing social transactions.

Finally, while nothing in the Japanese definitions of mental competency explicitly suggests the dependence of context-driven social cognition (at least not to the extent that the German and US standards do),¹²³ it seems reasonable to conclude that the Keihō's definition of mental competency requires the same comprehension and decision-making skills as *Dusky*,¹²⁴ because the Keihō assumes that individuals who lack such competency cannot be subject to legal proceedings.¹²⁵ Since these skills require the coordination of social and internal information,¹²⁶ they rely on the social-cognitive functions that facilitate them.¹²⁷

In conclusion, the legal definitions of mental competency, which are grounded in the social context of a legal interaction, suggest that the social-cognitive functions that facilitate the interaction between social context and individual intentions are a necessary component of the legal definition.

2. Competency as a Function of Social Moral Judgment

The second indication that social-cognitive functions underlie the legal definitions of mental competency is the emphasis on the ability to perceive and regulate one's behavior in the context of social norms. The moral incapacity and volitional incapacity tests,¹²⁸ which are a component of the US,¹²⁹ German,¹³⁰ and Japanese¹³¹ legal

122. BGB, *supra* note 56, §§ 104, 827, 1304; ZPO, *supra* note 64; MÜNCHENER KOMMENTAR, *supra* note 59; PALANDT, *supra* note 59; BECK'SCHE KURZ KOMMENTARE, *supra* note 67.

123. *See supra* notes 88-89 and accompanying text.

124. *Dusky v. United States*, 362 U.S. 402, 402 (1960); *supra* note 116 and accompanying text.

125. KEIHŌ, *supra* note 86, art. 1.

126. *See supra* note 107 and accompanying text.

127. *See Adolphs* 2001, *supra* note 101.

128. *See Clark v. Arizona*, 548 U.S. 735, 749-50 (2006).

129. *Id.*

130. StGB, *supra* note 68, § 20.

131. Minpō, *supra* note 80, art. 713.

definitions of mental competency, generally require an individual to appreciate the wrongfulness of his actions. Ostensibly, this requirement is predicated on an individual's ability to recognize societal standards of right and wrong, to appreciate how his actions will impact himself and others, and to appropriately regulate his behavior in conformance with the societal standards. These abilities all depend on social-cognitive functions, and this dependency further supports the assertion that social cognition underlies mental competency.

Social cognition research has well classified the neuropsychological basis for moral and ethical judgments.¹³² In fact, regulating behavior based on moral and societal norms is perhaps one of the most important aspects of social-cognitive functions:¹³³ social cognition provides the appropriate social input, which is necessary to produce the appropriate social behavior.¹³⁴ Moral judgment requires the cognitive function to recognize both one's own inner sense of morality and the sense of morality of others,¹³⁵ so it is natural that these cognitive functions are expressly indicated by the various legal definitions of mental competency.¹³⁶

It is also known, however, that the moral judgment-related cognitive functions are dissociable from other domain-general

132. See Adolphs 2009, *supra* note 5, at 697. Note that moral judgment is also heavily dependent on context and the interaction between internal and external factors. Adolphs 2001, *supra* note 101, at 698 (“We judge actions to be right or wrong, and the people who carry them out to be good or bad, based on emotion, inference, automatic and reflective processing, and a host of processes that have evolved to subserve reciprocity, fairness, loyalty, respect, and other behavioral disposition.”); Young et al., *supra* note 28, at 8235 (“Developmental evidence thus suggests that mature moral judgments depend crucially on the cognitive processes responsible for representing and integrating information about beliefs and outcomes.”); Moll et al., *supra* note 28, at 804 (“Humans integrate extensive contextual elements when assessing the behavior of others and when appreciating their own actions in a given situation.”).

133. Moll et al., *supra* note 28, at 799 (“Morality is a product of evolutionary pressures that have shaped social cognitive and motivational mechanisms, which had already developed in human ancestors, into uniquely human forms of experience and behavior.”); *id.*, at 804 (“Morality is a real-world business. It is about people navigating, interacting and making choices in an ever-changing world.”).

134. Adolphs 2001, *supra* note 101.

135. Young et al., *supra* note 28, at 8235 (Successful moral judgment requires “not just ‘theory of mind,’ or the ability to represent the mental states of others, but the ability to integrate this information with information about consequences in the context of moral judgment.”); Turkstra et al., *supra* note 109, at 5 (suggesting that impairments in this so-called perspective taking ability may be “one of the most socially handicapping sequelae” of impaired cognitive function).

136. *Clark v. Arizona*, 548 U.S. 735, 749-50 (2006); StGB, *supra* note 68, § 20; Minpō, *supra* note 80, art. 713.

cognitive functions, such as memory or attentional control.¹³⁷ It is possible, therefore, to retain the cognitive functions necessary to general functioning while losing the cognitive functions necessary to undertake appropriate social judgment. This dissociation is often seen in individuals who display extremely antisocial behavior, such as psychopaths.¹³⁸ Even though these individuals are often severely impaired in their abilities to regulate behavior based on appropriate societal norms, they can nevertheless be successful in their careers or their goals.¹³⁹ Cases such as these emphasize the importance not only of general cognitive abilities, such as intelligence or rational thinking, but also of the social-cognitive functions that allow individuals to modify their behaviors based on appropriate social norms.¹⁴⁰

This dissociation creates difficulty for the various legal definitions of mental competency. For example, it is possible to imagine a scenario in which, under the various German definitions of competency, an individual with these types of deficits is cognitively capable of performing a legal transaction,¹⁴¹ thereby meeting the legal definition of mental competency under the BGB.¹⁴² Simultaneously, however, the individual's deficits, which are presumably "serious mental abnormalities,"¹⁴³ might prevent him from appreciating the illegality or wrongfulness of his actions, thereby precluding mental competency under the StGB.¹⁴⁴ A similar scenario could be imagined for the mental competency definitions under US law: an individual may have the comprehension and decision-making abilities to be able

137. See, e.g., Adolphs 2009, *supra* note 5, at 704; Steven W. Anderson et al., *Impairment of Social and Moral Behavior Related to Early Damage in Human Prefrontal Cortex*, 2 *NATURE NEUROSCIENCE* 1032, 1032 (1995); Takahiro Osumi & Hideki Ohira, *The Positive Side of Psychopathy: Emotional Detachment in Psychopathy and Rational Decision-Making in the Ultimatum Game*, 49 *PERSONALITY & INDIVIDUAL DIFFERENCES* 451, 451 (2010); Mike Koenigs et al., *Damage to Prefrontal Cortex Increases Utilitarian Moral Judgments*, 446 *NATURE* 908, 908 (2007); see also *supra* note 108.

138. Anderson et al., *supra* note 137; Osumi, *supra* note 137; Koenigs et al., *supra* note 137.

139. Osumi, *supra* note 137 ("[P]sychopathy itself may not be decisive in one's social maladaptation; rather, it may enhance some types of social success. It has been a mystery why psychopathy includes such contradictory aspects as antisocial and successful achievements.").

140. Riling, *supra* note 115, at 36-37.

141. See MÜNCHENER KOMMENTAR, *supra* note 59; see also PALANDT, *supra* note 59.

142. BGB, *supra* note 56, § 104; MÜNCHENER KOMMENTAR, *supra* note 59; PALANDT, *supra* note 59.

143. STGB, *supra* note 68, § 20.

144. *Id.*

to meet the *Dusky* standard for mental competency,¹⁴⁵ but may be precluded from competency under *Clark* because his cognitive deficits impaired his social cognition and prevented him from appreciating that the act was wrong.¹⁴⁶ Finally, this same individual may be precluded from mental competency under both the civil¹⁴⁷ and criminal¹⁴⁸ legal definitions of Japan. These hypothetical examples¹⁴⁹ underscore social cognition's role within a determination of mental competency. If these legal determinations of mental competency did not contain a consideration of social cognition, they would be unable to distinguish between an individual who is cognitively capable of performing an action while conforming to social value norms and an individual who is cognitively capable of performing that action while not conforming to social value norms. Since this distinction is critically important for the purposes of determining competency under the definitions of all three counties,¹⁵⁰ a consideration of social cognition must underlie the legal definitions of competency.

In summation, the identifiable cognitive basis for moral judgment and the reliance on this aspect of human behavior within the various legal definitions of mental competency strongly suggest that the former underlies the latter, and further suggests that social-cognitive functions are a necessary component of the various legal definitions.

3. Competency as a Function of Normal Adult Cognition

The third and final indication that social-cognitive functions underlie the legal definitions of mental competency is the general presumption of competency within normal adults. Since social-cognitive functions are a natural component of normal human development,¹⁵¹ any presumption of competency in normal adults must necessarily refer to social-cognitive functions.

145. *Dusky v. United States*, 362 U.S. 402, 402 (1960); *see also supra* Part II.A.1.

146. *Clark v. Arizona*, 548 U.S. 735, 749-50 (2006).

147. MINPŌ, *supra* note 80.

148. KEIHŌ, *supra* note 86.

149. Note that, because mental competency is a legal determination, the courts would ultimately determine the fate of these hypothetical individuals. *See supra* note 97.

150. *Clark*, 548 U.S. at 749-50 (2006); StGB, *supra* note 68, § 20; Minpō, *supra* note 80, art. 713; *see also supra* note 136 and accompanying text.

151. *See* Stephanie Burnett & Sarah-Jane Blakemore, *The Development of Adolescent Social Cognition*, 1167 ANN. N.Y. ACAD. SCI. 51 (2009).

The legal definitions of mental competency presume competency both explicitly and implicitly. In the United States, the Supreme Court has held that the US Constitution permits an explicit presumption of competence under *Dusky*. In *Medina v. California*, the US Supreme Court held that a state law that imposed a presumption of competence on the defendant did not violate the Constitution's due process protections.¹⁵² Therefore, mental competency assumes that individuals are competent until proven otherwise, suggesting that mental competency refers to cognitive functions that are the norm, not the exception. Conversely, the legal definitions under *Clark* make an implicit presumption of mental competence. *Clark* creates a negative definition of mental competency, so that mental competency is described not by the presence of certain abilities (as is the case in *Dusky*),¹⁵³ but rather by the absence of certain abilities; that is, individuals are presumed competent unless they have a mental disease or defect and one of the corresponding incapacities.¹⁵⁴ Under German law, the presumption of competency is understood to be the general rule for both private law¹⁵⁵ and for criminal law.¹⁵⁶ Additionally, as was true for the United States' *Clark* definitions, both the BGB and the StGB define competency in negative terms,¹⁵⁷ further suggesting that normal cognitive functions are the legal standard. Finally, the Japanese laws imply a presumption of mental competency by creating a dichotomy between "insane" or "diminished" mental states, which are precluded from legal adjudication,¹⁵⁸ and all other mental states, which are not. In all three legal systems, then, mental competency is assumed to encompass normal adult functioning, including social cognition.

152. *Medina v. California*, 505 U.S. 437, 452-53 (1992). See generally Bruce J. Winick, *Presumptions and Burdens of Proof in Determining Competency to Stand Trial: An Analysis of Medina v. California and the Supreme Court's New Due Process Methodology in Criminal Cases*, 47 U. MIAMI L. REV. 817 (1993) (analyzing the merits of the US Supreme Court's due process-oriented approach to resolving the competency issue underlying *Medina*).

153. *Dusky v. United States*, 362 U.S. 402, 402 (1960).

154. *Clark*, 548 U.S. at 749-50; see also *supra* note 52 and accompanying text.

155. MÜNCHENER KOMMENTAR, *supra* note 59 ("The BGB is based on the rule that every person is competent to contract. It is standard only as an exception, then, that someone be viewed as incompetent or as having limited competence."); PALANDT, *supra* note 59 ("The law fundamentally views every person as being competent to contract.").

156. ROXIN, *supra* note 70 ("The legislature assumes that an adult who puts criminal injustice into effect is normally culpable").

157. BGB, *supra* note 56; STGB, *supra* note 68.

158. MINPŌ, *supra* note 80; KEIHŌ, *supra* note 86.

Social-cognitive functions are a critically important component of normal human existence,¹⁵⁹ and this importance further suggests that social cognition is inherently included in any consideration of normal cognition. These functions develop very early in life,¹⁶⁰ and by approximately two years of age, children can manipulate and produce complex social behaviors.¹⁶¹ Injury during this time period can produce lasting negative outcomes and impair the development of social-cognitive functions.¹⁶² There is no doubt, though, that typical adults have the ability to recognize both their own cognitive processes and those of the people around them.¹⁶³ Because social-cognitive functions are a necessary part of typical adult behavior, and because all three legal systems presume mental competence in typical adults, social-cognitive functions must be envisioned by the legal definitions of mental competency.

In summation, three key aspects of the various legal definitions of mental competency suggest that social-cognitive functions underlie mental competency's legal conceptualization. First, mental competency is a function of the law's social context and the interaction between an individual's internal and external social perceptions. Second, mental competency necessarily requires the ability to judge and regulate one's behavior against the backdrop of social moral norms. Third, the law generally presumes that individuals with typical cognitive abilities are mentally competent. Because social-cognitive functions underlie all three aspects, the legal

159. Adolphs 2001, *supra* note 101 (“Many species live in societies of multiple individuals, giving rise to opposing factors that shape the evolution of their social behavior: on one hand, groups can offer better prospects for survival; on the other hand, groups can generate within-group competition between individuals. A reconciliation of these factors is found in two distinct evolutionary solutions: rigid, eusocial behavior . . . or the highly complex, flexible social behavior exemplified by primates. The latter solution requires social cognition.”).

160. *Id.* (“The development of social cognitive abilities is tied closely to the development of emotion and of its communication between infant and mother, a topic that has seen enormous research from developmental social psychology.”); Burnett, *supra* note 151, at 51; Anderson et al., *supra* note 137.

161. Burnett, *supra* note 151, at 51.

162. Anderson et al., *supra* note 137.

163. Adolphs 2009, *supra* note 5, at 696 (“Yet in typical adults there is no doubt whatsoever that we have knowledge of other minds and our own.”); R. Raxe, S. Carey, & N. Kanwisher, *Understanding Other Minds: Linking Developmental Psychology and Functional Neuroimaging*, 55 ANN. REV. PSYCHOL. 87 (2004) (“Normal adults attribute to one another (and to themselves) unobservable internal mental states, such as goals, thoughts, and feelings, and use these to explain and predict behavior.”).

definitions of mental competency suggest a meaning that necessarily includes social cognition.

III. *POTENTIAL IMPROVEMENTS TO THE US DEFINITIONS OF COMPETENCY*

To conclude the analysis, Part III will briefly consider how and to what extent real-world legal trends within the United States follow the analysis as described in Part II. Part III will briefly critique certain practices related to competency and criminal justice in the United States, and will suggest a number of improvements that would allow for greater accommodation and recognition of the social-cognitive functions that underlie mental competency.

Despite the (relatively) unambiguous requirements for mental competency under the *Dusky* and *Clark* definitions, the results of competency determinations in practice do not always reflect the legal definition's underlying requirements or underlying concepts of fairness and justice. In the United States, competency hearings are a common occurrence, estimated at some 60,000 a year.¹⁶⁴ Of these, about eighty percent reach a finding of competency, with mental retardation and psychosis being the two most common exclusion factors.¹⁶⁵ Perhaps unsurprisingly, a myriad of anecdotes exist to demonstrate how individuals who have obvious cognitive impairments nevertheless face trial and punishment.¹⁶⁶ While these grim examples also illustrate the fact that mental competency is ultimately a legal question,¹⁶⁷ they nevertheless suggest possible improvements to the legal definitions of competency within the United States.

164. Mossman et al., *AAPL Practice Guideline for the Forensic Psychiatric Evaluation of Competence to Stand Trial*, 35 J. AM. ACAD. PSYCHIATRY & L. S3, S3 (2007); Liselotte van den Anker, *Fitness to Stand Trial: A General Principle of European Criminal Law?*, 7 UTRECHT L. REV. 120, 123 (2011).

165. Mossman et al., *supra* note 164, at S55.

166. *See, e.g.*, Ed Pilkington, *Texas Poised to Execute Intellectually Disabled Prisoner Within Hours*, THE GUARDIAN (Jan. 29, 2015), <http://www.theguardian.com/world/2015/jan/29/texas-execute-intellectually-disabled-prisoner-robert-ladd>; *see also* Erik Eckholm, *After Delay, Inmate is Executed in Georgia*, N.Y. TIMES (Dec. 9, 2014), http://www.nytimes.com/2014/12/10/us/georgia-supreme-court-refuses-to-delay-execution.html?_r=0. While this article recognizes that there are considerably more legal issues at play in these cases than merely the U.S. Constitution's standards for mental competency, these anecdotes are prime examples of individuals with obvious social-cognitive impairments.

167. *See supra* note 97.

First, the United States should consider a conceptualization of mental competency that emphasizes the interpersonal nature of cognition functioning. The language in the BGB is a good model to demonstrate the significance of this transactional nature of social cognition. Because the BGB's definition of mental competency focuses on the dyadic nature of legal exchanges,¹⁶⁸ it better represents the underlying nature of human social interactions. As described above, the social context of an individual's actions (legal or otherwise) is an important factor in competency.¹⁶⁹ The BGB's portrayal of competency captures the importance of accurately representing mental competency within the proper relational context.¹⁷⁰ Indeed, research on interpersonal interactions has recognized the importance of studying human cognition not in isolation but as part of a social system,¹⁷¹ so that the proper unit of measurement is not the cognitive abilities of the individual in a vacuum but the cognitive abilities of the individual as he interacts with those around him.¹⁷²

If the United States could incorporate explicit reference to the interpersonal, transactional nature of human cognition into the legal standards for mental competency, then it would better represent the underlying social-cognitive context. It should be noted that this theme is not entirely absent from the US legal system. Under *Dusky*, a competent defendant will be able to understand the criminal proceedings and consult with his lawyer, both of which are interpersonal,¹⁷³ and under *Clark*, an individual must appreciate the

168. MÜNCHENER KOMMENTAR, *supra* note 59; PALANDT, *supra* note 59.

169. *Supra* Part 2.A.1.

170. *See supra* note 122 and accompanying text.

171. *See, e.g.,* Riitta Hari et al., *Synchrony of Brains and Bodies During Implicit Interpersonal Interaction*, 17 TRENDS IN COGNITIVE SCI. 105, 105 (2013) ("Mutual understanding requires a certain level of between-participant similarity in perception and action Altogether, human brains and minds are not as private as traditionally thought."); Uri Hasson et al., *Brain-to-Brain Coupling: A Mechanism for Creating and Sharing a Social World*, 16 TRENDS IN COGNITIVE SCI. 114, 114 (2012) ("With so many cognitive faculties emerging from interpersonal space, a complete understanding of the cognitive processes within a single individual's brain cannot be achieved without examining and understanding the interactions among individuals.")

172. Hari et al., *supra* note 171 (suggesting that this research might "provide the necessary methodological and conceptual leaps from the level of individuals to dyads"); Hasson et al., *supra* note 171 (calling for a "shift from single-brain to multi-brain frame of reference").

173. *Dusky v. United States*, 364 U.S. 402 (1960) (per curiam).

wrongfulness of his actions,¹⁷⁴ which is also arguably interpersonal. Nevertheless, the US definitions lack a clear conceptualization of mental competency within a social frame of reference. Interestingly, lower courts in the United States have employed standards for mental competency law that approached the BGB's codified definition.¹⁷⁵ While these legal issues may be beyond the jurisdiction of the US Constitution and Supreme Court, they nevertheless make clear the inherently social nature of legal transactions.¹⁷⁶ Additionally, the American Academy of Psychiatry and Law's practice guidelines for forensic psychologists and psychiatrists suggests that a consideration of social cognitive factors is important in competency determinations.¹⁷⁷ While not explicitly advocating for an assessment of social-cognitive function, the guidelines urge examiners to obtain information to "establish rapport while simultaneously providing a helpful perspective on the defendant's intelligence and social functioning" and to "provide insight into how the defendant establishes or sustains relationships, which may help the psychiatrist gauge the defendant's capacity to relate to the defense attorney."¹⁷⁸ These examples all suggest that recognition of social transaction is an informal part of competency within the US legal system, but a more explicit reference within the US Constitution's legal definition would ensure that competency determinations are made with an account of social-cognitive functions.

Second, the United States should consider adopting a conceptualization of mental competency that accounts for diminished capacity. Both German and Japanese criminal law explicitly incorporate diminished mental capacity into the legal definition of mental competency.¹⁷⁹ In the United States, however, there is no clear

174. *Clark v. Arizona*, 548 U.S. 735, 749-50 (2006); *see supra* Part 2.A.2.

175. *See, e.g., In re Guardianship of O'Brien*, 847 N.W.2d 710 (Minn. 2014); *Davis v. Marshall*, No. 94APE02-158, 1994 WL 425169, at *3 (Ohio Ct. App. Aug. 9, 1994).

176. *In re Guardianship of O'Brien*, 847 N.W.2d at 715 (describing that competency exists if a person "has enough mental capacity to understand, to a reasonable extent, the nature and effect of what he is doing" or "can fairly understand the matter he is considering"); *Davis*, 1994 WL 425169, at *3 ("The test of competency to contract is whether the powers of a person's mind have been so affected as to destroy the ability to understand the nature of the act in which he is engaged, its scope and effect or its nature and consequences. If a person, at the time of entering into a contract, understands the nature, extent and scope of the business he is about to transact, and possesses that degree of mental strength which would enable him to transact ordinary business, he is in law considered a person of sound mind and memory.").

177. Mossman et al., *supra* note 164, at S33.

178. *Id.*

179. StGB, *supra* note 68, § 21; KEIHÖ, *supra* note 86.

standard: although the Model Penal Code adopted a provision for diminished capacity,¹⁸⁰ there is considerable debate over how diminished capacity should be implemented.¹⁸¹ The German and the Japanese models, however, are perhaps more accurate with regard to the variable nature of human cognition. As indicated in Part I, the definitions used by the German and Japanese codes suggest that mental competency and partial competency exist on a spectrum of mental cognitive function.¹⁸² This portrayal of human cognition on a spectrum, such that certain cognitive functions can exist at relative levels, is how scientific and medical research now characterizes certain human disorders, including those that can impair social-cognitive function.¹⁸³ The German and Japanese definitions, therefore, are perhaps better able to accommodate the broad range of cognitive functions that exist both in normal humans and in individuals with mental disorders.

Finally, the United States should consider adopting a conceptualization of mental competency that captures a wider range of conditions that might preclude competency. The German and Japanese definitions of mental competency better allow the inclusion of a broader range of social-cognitive impairments that could potentially affect competency. Recall that, while the United States defines incapacity as the product of a “mental disease or defect,”¹⁸⁴ German law defines incapacity as the product of a “pathological mental disorder, a profound conscious disorder, debility, or any other serious mental abnormality.”¹⁸⁵ It is possible, therefore, that certain social-cognitive deficits which meet the German standard might not meet the US standard. One highly relevant example is language disorders. Language is a key component of social-cognitive

180. Model Penal Code § 4.02(1) (Am. Law Inst., Proposed Official Draft, 1962).

181. See Stephen J. Morse, *Undiminished Confusion in Diminished Capacity*, 75 J. CRIM L. & CRIMINOLOGY 1, 28 (1984); Peter Arenella, *The Diminished Capacity and Diminished Responsibility Defenses: Two Children of a Doomed Marriage*, 77 COL. L. REV. 827, 863 (1977) (both arguing that the proper conceptualization of diminished capacity is the “mens rea” variant as opposed to the “diminished responsibility” variant).

182. See *supra* note 74 and accompanying text; see *supra* note 91 and accompanying text.

183. See Selwyn B. Renard et al., *Dissociation and Social Cognition in Schizophrenia Spectrum Disorder*, 137 SCHIZOPHRENIA RESEARCH 219, 219-20 (2012); Tiziana Zalla, *Amygdala, Oxytocin, and Social Cognition in Autism Spectrum Disorder*, 76 BIOLOGICAL PSYCHIATRY 356, 357 (2014).

184. *Clark v. Arizona*, 548 U.S. 735, 749-50 (2006).

185. StGB, *supra* note 68, § 20.

function,¹⁸⁶ and language disorders are generally over-represented in individuals within the criminal justice system.¹⁸⁷ While language disorders most likely contribute to negative outcomes in a legal context,¹⁸⁸ a language impairment might not necessary qualify as a “mental disease or defect” under the US definition. It could, however, qualify as a “serious mental abnormality”¹⁸⁹ under the German standard or a “weakened mind”¹⁹⁰ under the Japanese standard. Language and communication skills are especially important given the decision in *Cooper*, in which the US Supreme Court explicitly included the ability to effectively communicate with counsel within the *Dusky* standard.¹⁹¹ Because cognitive deficits such as language impairments¹⁹² appear to fall through the cracks under the current US

186. See Lyn Turkstra, *Should My Shirt Be Tucked In Or Left Out? The Communication Context of Adolescence*, 14 *APHASIOLOGY* 349, 349 (2000); Nancie Im-Bolter et al., *I Thought We Were Good: Social Cognition, Figurative Language, and Adolescent Psychopathology*, 54 *J. CHILD PSYCHOL. & PSYCHIATRY* 724, 724 (2013); Cynthia Dahlberg et al., *Social Communication Skills in Persons With Post-Acute Traumatic Brain Injury: Three Perspectives*, 20 *BRAIN INJURY* 425, 425 (2006).

187. See Juliette Gregory & Karen Bryan, *Speech and Language Therapy Intervention With a Group of Persistent and Prolific Young Offenders in a Non-Custodial Setting With Previously Undiagnosed Speech, Language and Communication Difficulties*, 46 *INT’L J. LANGUAGE & COMM. DISORDERS* 202, 203 (2011); Pamela C. Snow et al., *Oral Language Competence, Young Speakers, and the Law*, 43 *LANGUAGE, SPEECH, & HEARING SERVICES IN SCHOOLS* 496, 502-03 (2012).

188. Indeed, there is research to suggest that legal language is particularly difficult to cognitively comprehend and manipulate. See, e.g., Michele Lavigne & Gregory Van Rybroek, *“He Got in My Face so I Shot Him”*: How Defendants’ Language Impairments Impair Attorney-Client Relationships, 17 *CUNY L. REV.* 69 (2014); Pamela Snow & Martine Powell, *Youth (In)justice: Oral Language Competence in Early Life and Risk for Engagement in Antisocial Behavior in Adolescence*, 435 *TREND & ISSUES IN CRIME & CRIM. JUST.* 1 (2012); Joseph Wszalek & Lyn Turkstra, *Language Impairments in Youths with Traumatic Brain Injury: Implications for Participation in Criminal Proceedings*, 30 *J. HEAD TRAUMA & REHABILITATION* 86 (2015).

189. StGB, *supra* note 68, § 20.

190. KEIHŌ, *supra* note 86, art. 39, para. 2.

191. *Cooper v. Oklahoma*, 517 U.S. 348, 354 (1996).

192. Although the topic is beyond the limits of this article, it is unquestionable that functional language usage is also suggested within the various legal definitions of mental competency, as an individual’s ability to use language will profoundly affect his ability to act within the legal system. See Michele Lavigne & Greg J. Rybroek, *Breakdown in the Language Zone: The Prevalence of Language Impairments among Juvenile and Adult Offenders and Why It Matters*, 15:1 *U.C. DAVIS JUV. L. & POL’Y* 37, 69; see also Wszalek, *supra* note 188, at 88-90. The cognitive and neurobiological bases for language and communication in humans have been extensively studied. See, e.g., Uri Hasson & Steven L. Small, *Functional Magnetic Resonance Imaging (fMRI) Research of Language*, in *HANDBOOK OF THE NEUROSCIENCE OF LANGUAGE* 81 (Brigitte Stemmer & Harry A. Whitaker, eds., 2008); see also Charles A. Perfetti & Gwen A. Frishkoff, *The Neural Bases of Text and Discourse Processing*, in

definition of mental competency, the adoption of a definition closer to that of Germany or Japan may allow US courts to better observe the fundamental concepts of fairness and due process that underlie competency requirements and to better reflect the prevailing scientific and medical norms.¹⁹³

CONCLUSION

The scientific progress of the twenty-first century has discovered a multitude of information about the nature and function of the human brain and human mental conditions.¹⁹⁴ National and international actors¹⁹⁵ increasingly recognize the social aspect of human cognition, social cognition, as a fundamental and necessary component of healthy human life.¹⁹⁶ As this information draws greater and greater traction within global society, however, it is unclear how the scientific understanding of human cognition relates to legal definitions of mental capacity and mental competence. As this Article concluded, it appears that the plain-text legal definitions of three important legal systems (those of the United States, Germany, and Japan) all envision social cognition as a component of the legal consideration of mental competency.¹⁹⁷ However, the current US legal standards for mental competency would be better able to reflect the underlying scientific and biological realities if the United States were to incorporate features of the German and the Japanese definitions.¹⁹⁸ Even though no one legal definition will (or perhaps even should)¹⁹⁹ fully

HANDBOOK OF THE NEUROSCIENCE OF LANGUAGE 165 (Brigitte Stemmer & Harry A. Whitaker, eds., 2008).

193. *See supra* note 27 and accompanying text.

194. *See supra* note 4.

195. *See supra* notes 8-11.

196. *See, e.g., Social Participation*, WORLD HEALTH ORGANIZATION, http://www.who.int/social_determinants/thecommission/countrywork/within/socialparticipation/en/ (defining social participation as “one of the main axes for the development of the Primary Health Care Strategy and in reaching health system goals” in the 2008 World Health Report); *see also Social (Pragmatic) Communication Disorder*, AMER. PSYCHIATRIC ASSOC., <http://www.dsm5.org/Documents/Social%20Communication%20Disorder%20Fact%20Sheet.pdf> (indicating that, under the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders released in 2013, impairments to social communication and social participation are a recognized and medically-classified disorder).

197. *See supra* Part II.

198. *See supra* Part III.

199. It is important to remember that, as has been indicated several times, the question of mental competency is ultimately a legal question that must be answered by the law. *See supra* note 97.

incorporate the underlying scientific bases of human mental functions, the German definitions of mental competency reflect certain important aspects of the transactional, context-driven nature of human cognition and explicitly define competency within a social context.²⁰⁰ Additionally, both the German and the Japanese definitions accommodate diminished mental capacity, which more accurately represents the spectrum of cognitive functioning (social or otherwise) that individuals can possess.²⁰¹

As society and scientific understanding become more and more global, comparative legal analyses play an important role in analyzing US laws, and the legal language related to mental competency is no exception. Although the United States, Germany, and Japan all rely on legal definitions of mental competency that suggest a certain set of essential cognitive functions, the United States would do well to consider the German and Japanese definitions so that its legal standards can better reflect both the underlying biological processes and the fundamental notions of fairness and due process.

200. BGB, *supra* note 56; MÜNCHENER KOMMENTAR, *supra* note 59; PALANDT, *supra* note 59

201. StGB, *supra* note 68, art. 39, § 21; KEIHŌ, *supra* note 86, para. 1; *see supra* note 74 and accompanying text; *see also supra* note 91 and accompanying text.