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If Animals are Like Our Children Let Us Treat Them Alike: Creating Tests of an Animal's Intelligence for Determinations of Legal Personhood

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If Animals are Like Our Children Let Us Treat Them Alike: Creating Tests of an Animal's Intelligence
for Determinations of Legal Personhood

Paul McLaughlin¹

Abstract: Children and animals are treated much the same under the law. Both are seen as having limited, if any, legal rights. For children there are legal processes that can be used to determine if a minor is mature enough to be considered a legal person for life affecting decision making considerations and emancipation proceedings. Animals, no matter what their intelligence levels, are not allowed an opportunity to be found as legal persons and are denied the rights, privileges, and responsibilities that legal personhood bestows. This article looks at the similarities between the historical treatment of children and animals and argues that animals should have the opportunity to be judged to be sentient beings who have legal personhood rights using tests similar in nature to those that allow children to become emancipated from their parents or be deemed mature minors for the purposes of making medical decisions.

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I. Introduction

The idea that animals are not humans and therefore should not be treated in the same manner has been supported by legal, philosophical, and scientific experts throughout history.² Animals have been charged with crimes, found guilty, and punished as humans would be by courts, but they have not been given the opportunity to access the same courts to defend their rights against abusive or torturous treatment.³ Under the present state of the law, animals are considered property on the same level as household items.⁴ The predominant legal and social view that animals are property has been cited as a contributing factor in the ineffectiveness of anti-cruelty laws.⁵ Supported by new studies on animal intelligence and social sophistication, advocates have fought for basic animal rights and have taken their arguments to the courts.⁶ In order to overcome the prevailing attitudes and legal defaults that allow cruel treatment of animals, animals must be seen as having the right to not suffer due to human actions unnecessarily.⁷ It has been stated by animal welfare experts that animals have five basic freedoms that deserve legal protection: freedom from hunger and thirst, freedom from discomfort, freedom from pain, injury, and disease, freedom to behave normally, and freedom from fear and distress.⁸

The notion that animals could be granted rights under the law was once ridiculed, but now courts and legislatures have begun to move towards granting animals greater protections from cruelty and emotional trauma.⁹ Animal law as a course of study was not available in law schools until the early 1970's, it has since grown into a field of debate and study that has drawn in experts from around the world.¹⁰ The rules of law that treat animals as property have been fought by animal rights advocates as

² Steven M. Wise, *Rattling the Cage Defended*, 43 B.C. L. REV. 623, 624-631 (2002).

³ Adam Kolber, *Standing Upright: The Moral and Legal Standing of Humans and Other Apes*, 54 STAN. L. REV. 163, 178-182 (2001).

⁴ GARY L. FRANCIONE, INTRODUCTION TO ANIMAL RIGHTS YOUR CHILD OR YOUR DOG?, 54-72 (2000).

⁵ *Id.* at xi-xii.

⁶ William Glaberson, *Legal Pioneers Seek to Raise Lowly Status of Animals*, N.Y. TIMES, August 18, 1999, <http://www.nytimes.com/1999/08/18/us/legal-pioneers-seek-to-raise-lowly-status-of-animals.html>.

⁷ Francione, *supra* note 3, at 81-82.

⁸ Penny Hawkins et al. *Report of an RSPCA/AHVLA Meeting on the Welfare of Agricultural Animals in Research: Cattle, Goats, Pigs and Sheep*, 13 ANIMAL TECHNOLOGY 43, 44-45 (2014).

⁹ David Farve, *The Gathering Momentum*, 1 J. ANIMAL L. 1, 3-6 (2005).

¹⁰ Joyce Tischler, *Building Our Future*, 15 ANIMAL L. 7, 8-10 (2008).

being archaic as the laws that once allowed for slavery.¹¹ Animal owners are now being treated as guardians of animals rather than property owners who may benefit from their animals, but who must also ensure their health.¹² Due to their lack of legal personhood under the law, when animals are injured or their wellbeing is threatened advocates and owners are often barred from bringing claims on the behalf of animals due to animals' lack of legal standing to argue for the animals they are attempting to aid.¹³

Children have been seen by philosophers and the law as property that are under the control of their parents.¹⁴ Examining the relationship between children and their caregivers has be likened to examining the relationship between those between "other sentient animals" and their owners.¹⁵ The earliest anti-child abuse laws stemmed from efforts to end animal cruelty and sought to protect children not only from abusive guardians, but also from exploitation through labor and medical experimentation.¹⁶ Inspired by anti-child cruelty laws, reforms were made to address medical research abuses, availability of education, eugenics, and a variety of other social problems, often with such reforms being backed by arguments comparing the legal status of animals and children.¹⁷ The current state of the law is a hodgepodge of common law, statutes, and agency regulations which makes it difficult to determine what, if any, choices a child can make and what protections from harm they have.¹⁸

Legal personhood, and the protections that go along with it, can be granted to items or people and is defined as a person or object having the ability to be found by courts to have at least one legal right and having access to the courts to defend that right.¹⁹ Animals and children share such similar states in the

¹¹ Steven M. Wise, *Animal Thing to Animal Person – Thoughts on Time, Place, and Theories*, 5 ANIMAL L. 61, 61-68 (1999).

¹² Susan J. Hankin, *Making Decisions about Our Animals' Health Care: Does It Matter Whether We Are Owners or Guardians*, 2 J. ANIMAL J. & PROPERTY 1, 5-9 (2009).

¹³ Taimie L. Bryant, *Animals Unmodified: Defining Animals / Defining Human Obligations to Animals*, 2006 U. CHI. LEGAL F. 162, 184-189 (2006).

¹⁴ B. Hull, *The Origin of Parental Right*, 13 PUB. AFF. Q. 73, 74-78 (1999).

¹⁵ Peter Vallentyne, *Equality and the Duties of Procreators*, in THE MORAL AND POLITICAL STATUS OF CHILDREN 195, 197 (David Archard & Colin M. MacLeod eds., 2002).

¹⁶ SUSAN PEARSON, THE RIGHTS OF THE DEFENSELESS (2011).

¹⁷ *Id.* at 192-200.

¹⁸ Sarah J. Baldwin, *Choosing a Home: When Should Children Make Autonomous Choices About Their Home Life*, 46 SUFFOLK U.L. REV. 503, 503-504 (2013).

¹⁹ Steven M. Wise, *Legal Personhood and the Non-Human Rights Project*, 17 ANIMAL L. 1, 1-2 (2010).

philosophical and legal realms that the arguments used to grant children basic welfare and self-determination rights could be applied to grant the same kinds of protections and rights to animals.²⁰ This article argues that due to their similar historical and contemporary treatment under the law that tests similar in nature to those used to determine whether a child can be emancipated or are mature enough to make medical decisions could be created to make determinations whether some species of animals are emotionally and intellectually developed enough to be declared legal persons.

II. Historical and Legal Similarities in the Treatment of Animals and Children

A. Denial of Value for Animals' and Children's Companionship Due to Lack of Inherent Value

i. Legal Value of Animals' Companionship

Animals, much like children, are considered part of the family and can face injury or death which denies their family the enjoyment of their company.²¹ Under the majority view of the law, an animal's value, even if the animals are bred for the purpose of being companion animals, is limited to their market value and their families cannot recover for loss of companionship or for damages resulting from emotional trauma if the animals are harmed or lost.²² Courts have been reluctant to make changes to the state of the law regarding recovery of damages for the loss of companionship with an animal, but legislatures in several states have passed laws allowing for recovery of such damages.²³

ii. Legal Value of Children's Companionship

In the past, the law would not allow parents to recover damages through claims based on the loss of companionship or emotional trauma due to the injury or loss of a child.²⁴ Damages for the loss of a

²⁰ Samantha Brenna, *Children's Choices or Children's Interest: Which Do Their Rights Protect?*, in THE MORAL AND POLITICAL STANDING OF CHILDREN, 53, 66-67 (David Archard and Colin M. MacLead eds. 2002).

²¹ Frank R. Ascione et al., *Battered Pets and Domestic Violence Animal Abuse Reported by Women Experiencing Intimate Violence and by Non-Abused Women*, 13 VIOLENCE AGAINST WOMEN 354, 355-358 (2007).

²² William C. Root, *Man's Best Friend: Property or Family Members – An Examination of the Legal Classification of Companion Animals and its Impact on Damages Recoverable for their Wrongful Death or Injury*, 47 VILL. L. REV. 423, 426-439 (2002).

²³ Elaine T. Byszewski, *Valuing Companion Animals in Wrongful Death Cases: A Survey of Current Court and Legislative Action and a Suggestion for Valuing Loss of Companionship*, 9 ANIMAL L. 215, 230 (2003).

²⁴ Benny Agosto & Mario A. Rodriguez, *What About the Parents? Can the Parents of a Non-Fatally Injured Child Recover Damages for Loss of Consortium?*, 66 TEX. B.J. 396, 397-400 (2003).

child's affections and companionship were not allowed by the courts due to the prevalent idea that only husbands could recover damages for loss of companionship due to the loss of sexual relations with their wives²⁵ and that children themselves did not have an inherent value that was recognized by the law beyond those that could be found under the master and servant relationship recovery theory which limited damage recoveries to the loss of value of a child's labor and help in supporting the household.²⁶ Due to shifts in society's view of children and their role in the family, courts and legislatures have begun to allow parents to recover damages to compensate them for the loss of enjoyment of being with their children.²⁷

B. Animals and Children as Sources of Labor

i. Animals as Sources of Labor and Food

Animals have been used for labor throughout the history of civilization, often under brutal conditions.²⁸ Animals are still used as physical labor and endure injuries due to the harsh nature of their work and abuse by their owners.²⁹ Animal use in agriculture in areas where it is difficult to obtain gas and modern farm equipment can place animals under considerable physical strain that requires specialized diets and supplements to maintain working animals' health that are often not available due to the isolation of the regions that the animals work in.³⁰ The use of animals in agriculture is seen as inefficient and a sign of a country being backwards in its thinking by industrial and political leaders in poorer countries and so little concern is given to the welfare of the animals as an ethical or legal matter even though animals are often the major source of labor for meeting citizens' nutritional needs.³¹

After their use as labor is determined to be over, animals are often slaughtered using inhumane methods that frighten other nearby animals.³² The use of animals as a source of food has cultural grounds

²⁵ Jean C. Love, *Tortious Interference with the Parent-Child Relationship: Loss of an Injured Person's Society and Companionship*, 51 IND. L. J. 590, 613-615 (1976).

²⁶ *Id.* at 599-601.

²⁷ Agosto & Rodriguez, *supra* note 23.

²⁸ J. LINDSAY FALVEY, AN INTRODUCTION TO WORKING ANIMALS 1-7 (1985).

²⁹ William J. Swann, *Improving the Welfare of Working Equine Animals in Developing Countries*, 100 APPLIED ANIMAL BEHAVIOR SCI. 148, 148-150 (2006).

³⁰ MICHAEL R. GOE & ROBERT E. MCDOWELL, ANIMAL TRACTION: GUIDELINES FOR UTILIZATION 41-48 (1980).

³¹ Paul Starkey, *Livestock for Traction: World Trends, Key Issues and Policy Implications* 55-62 (2010).

³² Falvey, *supra* note 27, at 7.

that are influenced by race, economic status, and viewpoints as to what is considered too high a degree of animal suffering.³³ The current methods of raising farm animals in confined spaces, which causes them behavioral problems and high levels of stress, were developed during World War II to produce food in a minimum amount of time to combat food shortages.³⁴ Changes to the animal farming industry have been occurring due to customer pressures for humane treatment of animals, but fundamental changes in the systems used and the thought process that goes into using animals as a food source must be made to ensure that animals have as high quality of life as possible.³⁵

ii. Children as Sources of Labor

Child labor has been used throughout history and its impact on children and economies overall has not been studied in depth, but it is most often found in poor and uneducated regions.³⁶ The use of child labor has been shown to decrease a child's opportunity for education which not only limits their income and growth potential, but also weights down an economy as a whole due to the lack of vertical mobility of a country's citizens due to the lack of specialized skills.³⁷ Children are used as often used as part of the labor force in dangerous jobs, despite concerns for their health, due to the fact that they play such a vital part of their countries' economies.³⁸ The use of child labor in industries such as clothing and sports equipment manufacturing have drawn international condemnation, but a vast number of children workers are not accounted for due to their being in positions that are difficult to monitor.³⁹ Labor laws have been put into place to protect children from dangerous working conditions and exploitation but fatal

³³ Maneesha Dechka, *Teaching Posthumanist Ethics in Law School: The Race, Culture, and Gender Dimensions of Student Resistance*, 16 ANIMAL L. 287, 301-305 (2010).

³⁴ Roland James Bonney, *Farm Animal Welfare at Work*, 100 APPLIED ANIMAL BEHAVIORAL SCI. 140, 141 (2006).

³⁵ *Id.* at 142-147.

³⁶ Jean-Marie Baland & James A. Robinson, *Is Child Labor Inefficient?*, 108 J. POL. ECON. 663, 663-667 (2000).

³⁷ Sylvain E. Dessy, *A Defense of Compulsive Measures Against Child Labor*, 62 J. DEVELOPMENT ECON. 261, 262-263 (2000).

³⁸ Kaushik Basu, *Child Labor: Cause, Consequence, and Cure, with Remarks on International Labor Standards*, 37 J. ECON. LITERATURE 1083, 1083-1084 (1999).

³⁹ Sonia Bhalotia & Christopher Heady, *Child Farm Labor: The Wealth Paradox*, 17 WORLD BANK ECON. REV.

accidents still occur and with a high percentage of those accidental deaths associated with children working for family members in agricultural positions.⁴⁰

C. The Use of Animals and Children in Medical Research

i. Animals in Medical Research

The use and mistreatment of animals in research became so prevalent that laws, such as the Lab Animal Welfare Act, had to be put into place to prevent animals from being kept in cruel conditions, used in inhumane studies, and protect pets from being stolen and sold to medical researchers.⁴¹ A number of charitable and professional organizations have worked to reduce the number of animals used in medical research, but a large number of animals are still used for a variety of experiments.⁴² Under current ethical guidelines, research involving animals is to be conducted in a way that allows animals to behave as the normally would and be free of emotional and physical distress as determined by a species by species examination of the techniques used.⁴³ Harm-benefit analyses have been put into place to ensure that animals do not suffer needlessly and to curb experiments that do not offer compelling reasons to use animals.⁴⁴ Masterson and Renberg have found that those involved in medical research are prone to support animal use in research more than the patients who might benefit from the findings of the research.⁴⁵ The degree of support for the use animals in research varies depending on location and the species involved.⁴⁶ Surveys have found that dogs and primates draw the most negative reactions to their use due to dogs being seen as pets and primates as having humanlike qualities, while mice and rats get more positive reactions due to their traditional roles as test animals.⁴⁷ In a reflection of such attitudes

⁴⁰*Id.* at 276.

⁴¹ GARY FRANCIONE, ANIMAL PROPERTY & THE LAW, 191-192 (1995).

⁴² Natalie Burben et al., *Pioneering Better Science Through the 3Rs: An Introduction to the National Centre for the Replacement of Animals in Research (NC3Rs)*, 54 J. AM. ASS'N FOR LABORATORY ANIMAL SCI. 198, 198-207 (2015).

⁴³ Hawkins et al., *supra* note 8, at 44-45.

⁴⁴ G. Griffin et al., *Scientific Uses of Animals: Harm-Benefit Analysis and Complementary Approaches to Implementing the Three R's*, 33 REV. SCI. TECH. 265, 265-269 (2014).

⁴⁵ Marlin Masterston et al., *Patients Attitudes Towards Animal Testing: "To conduct research on animals, I suppose, is a necessary evil."*, 9 BIOSOCIETIES 24, 24-25 (2014).

⁴⁶ *Id.* at 25-26.

⁴⁷ *Id.* at 26.

towards traditional research animals, under the Animal Welfare Act, special exclusions for birds, mice, and rats bred for laboratory research and a variety of farm animals allow them to be used in experiments that would normally be held to be cruel to other animals.⁴⁸

ii. Children in Medical Research

Gaining informed consent from parents or a child before a child was given medical treatment or involved in research has not always been required.⁴⁹ Medical trials often used minor children, with or without their or their parent's consent, in dangerous and unbeneficial trials to the extent that public protests against the practice prompted laws to protect children from exploitation.⁵⁰ Now, before medical treatment of any kind is administered to a child, the child's parents have to consent and the child, particularly if the child is over the age of 12, must consent to the treatment as well.⁵¹ The ethical and legal safeguards that have been put into place to insure children involved in medical research are exposed to no more than minimal risk to their wellbeing have been protested by researchers who argue such protections are too restrictive and impede the progress of medical advancement.⁵² Though informed consent is required for a child to be involved in research, medical researchers have tried to avoid full disclosure of what is involved in the research and argue against providing enough information for a patient to give informed consent using rationale such as: full disclosure would destroy the trust between doctor and patient, the patient may not want to be involved in the research by other patients but medical knowledge would benefit from their involvement, and that giving full disclosure of what the research would entail would put too much stress on the patient.⁵³

⁴⁸ Animal Welfare Act 7 U.S.C. §2132 (2008).

⁴⁹ Committee on Bioethics, *American Academy of Pediatrics, Informed Consent in Decision Making in Pediatric Practice*, 138 PEDIATRICS (2016),

<http://pediatrics.aappublications.org/content/pediatrics/early/2016/07/21/peds.2016-1484.full.pdf>

⁵⁰ Eva Welisch & Luis A. Altamirano-Dias, *Ethics of Pharmacological Research Involving Adolescents*, 17 PEDIATRIC DRUGS 55, 55-56 (2015).

⁵¹ Committee on Bioethics, *supra* note 47.

⁵² Beverly Woodward, *Challenges to Human Subject Protections in US Medical Research*, 282 JAMA 1947, 1948-1952 (1999).

⁵³ Jane L. Hutton & Richard E. Ashcroft, *Some Popular Versions of Uninformed Consent*, 8 HEALTH CARE ANALYSIS 41, 42-51 (2000).

III. Cognitive and Emotional Capacity in Animals and Children

A. Studies and Viewpoints on the Animal Mind

Cognitive processes can range from being aware of external changes, to conscious cognition, which entails being aware of internal and external inputs, to primary consciousness, which includes the ability to create mental situations in order to make decisions.⁵⁴ Whether animals can have feelings or are capable of sentient thought, and what sentient thought entails, has been debated since the earliest philosophers examined the issue.⁵⁵ Darwin described sentience as “feelings that matter” that guide animals, including humans, towards successful behaviors.⁵⁶ While the percentage of people who believe animals have cognitive powers vary with the species of animals named, it has been found that scientists have the lowest levels of belief that animals can have cognitive abilities when compared to lay people and significantly less than those who identify as animal welfare supporters.⁵⁷ Under the laws of Quebec, all animals are recognized as sentient and are to be treated in a manner that ensures their welfare and safety.⁵⁸

The idea that animal experiences and emotions could or needed to be studied was once rejected, but it is now accepted that animals do experience feelings, that those feelings motive their behavior and preferences, and can motivate the animal to behave in a certain way.⁵⁹ Animals have been found to have much higher cognitive abilities than have traditionally supposed and be able to express a variety of emotional responses including reactions to distress and pain.⁶⁰ Elephants, which have been found to have high mental sophistication, have been observed acting altruistically to care for injured herd members and

⁵⁴ K.P. Chandroo, I.J.H. Duncan, & R.D. Mocca, *Can Fish Suffer? Perspectives on Sentience, Pain, Fear and Stress*, 86 APPLIED ANIMAL BEHAVIOR SCI. 225, 226-227 (2004).

⁵⁵ Ian J.H. Duncan, *The Changing Concept of Animal Sentience*, 100 Applied Animal Behavior Sci. 11, 11-13 (2006).

⁵⁶ John Webster, *Animal Sentience and Animal Welfare: What is it to Them and What is it to Us?*, *Animal Sentience: The Other Minds Problem*, 1 ANIMAL SENTIENCE 1, 1 (2016).

⁵⁷ Sarah Knight, *Science Versus Human Welfare? Understanding Attitudes Towards Animal Use*, 65 J. SOC. ISSUES 463, 473-479 (2009).

⁵⁸ Animal Welfare and Safety Act, S.Q. 2015, c 35 (Can.).

⁵⁹ Richard D. Kirkden & Edmond A. Pajor, *Using Preference Motivation and Aversion Tests to Ask Scientific Questions About Animal Feelings*, 100 APPLIED ANIMAL BEHAVIOR SCI. 29, 30-33 (2006).

⁶⁰ Donald M. Broom, *Sentience and Pain in Relation to Animal Welfare*, in *Proc. XVII Int'l Cong. On Animal Hygiene* 3, 3-7 (2015).

morning the dead.⁶¹ While research has shown that animals do feel a variety of emotions, more research is needed to understand the impact of such emotions and whether they give rise to sentience as it has been applied to vertebrates by most commentators.⁶²

B. Children's Mental Development and Autonomy

Development of awareness in children is not seen as a series of clearly defined moves from one state to another, but a gradual development that relies on previous experiences and gains in overall mental sophistication.⁶³ The cognitive differences between children and adults, due to their respective stages in development, require that children's rights be based on the welfare of the child rather than granting them human rights as given to adults.⁶⁴ It has been argued that beyond granting children the rights to basic needs, security, and autonomy that the most effective way to deal with the transformative nature of a child's development mentally and physically is to place the ethic of care for children on those most accountable for a child's wellbeing.⁶⁵ In order to protect children's interests, the law sees them as being held in a form of trust by their parents, who are charged with acting as fiduciaries who must allow their children the opportunity to grow with as much autonomy as possible while protecting their wellbeing.⁶⁶ As a child grows and matures the degree of control over their self-determination shifts between the child, the child's parents, and governmental authorities so that as the child gains in mental sophistication they are granted more opportunities to voice their thoughts in matters that affect them and gain greater decision making powers.⁶⁷ In situations where a child's mental development is in question for

⁶¹ Iain Douglas-Hamilton et al., *Behavioral Reaction of Elephants Towards A Dying and Deceased Matriarch*, 100 APPLIED ANIMAL BEHAVIOR SCI. 87, 100-101 (2006).

⁶² Duncan, *supra* note 48, at 16-17.

⁶³ Rochat Philippe, *Layers of Awareness in Development*, 38 DEVELOPMENTAL REV. 122, 123-125 (2015).

⁶⁴ Harry Brighthouse, *What Rights (if any) Do Children Have?*, in THE MORAL AND POLITICAL STATUS OF CHILDREN 31, 39-52 (David Archard & Colin M. MacLeod eds. 2002).

⁶⁵ Barbara Arneil, *Becoming Versus Being: A Critical Analysis of the Child in Liberal Theory*, in THE MORAL AND POLITICAL STATUS OF CHILDREN 70, 86-94 (David Archard & Colin M. MacLeod eds., 2002).

⁶⁶ Elizabeth S. Scott & Robert S. Scott, *Parents as Fiduciaries*, 81 VA. L. REV. 2401, 2401-2405 (1995).

⁶⁷ Emily Buss, *Allocating Developmental Control Among Parent, Child and the State*, 2004 U. CHI. LEGAL F. 27, 27-29 (2004).

important life decisions, such as medical treatment, judges can interview the child and make a determination if the child is mature enough to make an informed, rational decision for themselves.⁶⁸

C. Tests of Cognition in Children in the Legal and Child Development Fields

i. Tests by Courts to Determine a Child's Level of Cognition

While over half the states have created schemes to determine whether a child should be emancipated or make decisions on their own, a number of states do not provide guidance and leave the determination as to a child's ability to be self-supporting or rational decision making skills to the court and after making a determination the court may have to ask for parental consent before declaring a minor as being an independent legal person.⁶⁹ The lack of standards for the emancipation of children makes it difficult to determine what criteria were used to grant or deny a child's request for emancipation and what situations, such as abuse or neglect, contributed to the court's decision to grant emancipation.⁷⁰ As a possible way of looking at the conundrum of determining legal independence from another perspective, courts have had to make determinations as to whether a child should be placed back under the protection of their parents due to debilitating disease or injury, but the standards used to decide such matters vary widely due to the circumstances presented, and focus on whether the child would be capable of supporting themselves rather than making determinations as to their mental capabilities and what they needed to demonstrate in order to remain independent under the law.⁷¹

ii. Tests of a Child's Cognitive Abilities in Child Development Studies

A number of studies have been conducted on the changes in maturity levels and personality traits of adults but comparatively few have been done to examine their development in children.⁷² Tests have

⁶⁸ Irma M. Hein, Informed Consent Instead of Assent is Appropriate in Children from the Age of Twelve: Policy Implications of New Finding on Children's Competence to Consent to Clinical Research, 16 B.M.C. MED. ETHICS (2015), <https://bmcmethics.biomedcentral.com/articles/10.1186/s12910-015-0067-z>.

⁶⁹ Mayra Alicia Cataldo, *Safe Haven: Granting Support to Victims of Child Abuse Who Have Been Judicially Emancipated*, 52 FAMILY CT. REV. 592, 593-594 (2014).

⁷⁰ Lauren C. Barnett, *Having Their Cake and Eating it Too?: Post-Emancipation Child Support as a Valid Judicial Option*, 80 U. CHI. L. REV. 1799, 1802-1805 (2013).

⁷¹ Katherine Byrns, Note, *Postmajority Child Support for Children With Disabilities*, 51 FAMILY CT. REV. 502, 506-508 (2013).

⁷² Avshalom Caspi et al., *Personality Development: Stability and Change*, 56 ANN. REV. PSYCHOL. 453, 468 (2005).

been created to measure a child's intelligence and ability to approach a situation using logic through the use of a series of problems and puzzles that allow insight into how a child works through a problem or situation and evaluating them using a series of metrics that provide a detailed overview of a child's cognitive abilities.⁷³ Non-verbal tests have been created to examine the intelligence of adolescents and to determine an individual's object manipulation finesse, problem solving skills, and various mental abilities such as working memory and processing speed.⁷⁴ It has been found that cognitive and intelligence tests involving children have to take into consideration things such as motivational factors since children have been shown to respond in a different manner when asked about things such as candies rather than inedible tokens.⁷⁵

IV. Possible Issues for Creating Tests to Determine Legal Personhood for Animals

While a number of studies have attempted to examine how complex animal thoughts can be and how their minds process information, due to the lack of standardization of metrics and tests, little progress has been made as a whole to gain insight into how animal minds work.⁷⁶ A test for an animal's level of sentience and situational comprehension, much like the tests used to determine if a minor can be emancipated from parents or make medical decisions, could be constructed using a problem that the animal has to work through that would demonstrate that the animal could analysis the situation, use logic, and that they have a basic understanding of the situation before them.⁷⁷ Tests to determine whether an animal could be considered a legal person, much like those that determine whether an A.I. or humans is asking or responding to questions, will need to take into consideration a variety of differences in animals' and humans' communicative and physical abilities or they will encounter the same kinds of issues online

⁷³ Matthew R. Reynolds, *Multi-group and Hierarchical Confirmatory Factor Analysis of the Wechsler Intelligence Scale for Children – Fifth Edition: What Does it Measure?*, INTELLIGENCE (2017), <http://dx.doi.org/10.1016/j.intell.2017.02.005>.

⁷⁴ Ryan J. McGill, *Investigation of the Factor of Structure of the Comprehensive Test of Non-Verbal Intelligence – Second Edition (CTONI – 2) Using Exploratory Factor Analysis*, 34 J. PSYCHOEDUCATIONAL ASSESSMENT 339, 342-347 (2016).

⁷⁵ Pierre Barrouillet, *Theories of Cognitive Development: From Piaget to Today*, 38 DEVELOPMENT REV. 1, 3-4 (2015).

⁷⁶ Cecilia Heyes, *Animal Mindreading: What's The Problem?*, 22 PSYCHONOMIC BULLETIN & REV. 313 (2015).

⁷⁷ Christof Koch & Guilo Tononi, *A Test for Consciousness*, 304 SCI. AM. 44, 44-47 (2011).

C.A.P.T.C.H.A. tests have that block legitimate users from accessing information due to color blindness, auditory limitations, or other user traits.⁷⁸

A. Overcoming Communication Barriers

Defining what human sentience and cognition consists of is difficult, trying to define what sentience and cognition is in animals is even more complex of a problem due to the differences in communication methods, physiology, and the senses between humans and animals.⁷⁹ Whether it is possible to communicate with an animal at all, much less at the level that would allow a test to be given, has been debated in the animal protection movement in since the publication of an article in the animal anti-cruelty magazine *Our Dumb Animals* by Harriet Beecher Stowe in February 1869 titled “The Rights of Dumb Animals” which argued that animals needed others to protect their rights and wellbeing due to their inability to speak or write.⁸⁰ The publication of Stowe’s article drew an anonymous editorial response in the next month’s publication that held that while animals could not communicate as humans do there could be ways that animals and humans could convey ideas to humans if the definition of what communication entailed was broadened.⁸¹ Bonobos and chimpanzees can be taught forms of sign and symbol based language to communicate, however not all animals can communicate in such a fashion.⁸² Researchers have sought to bridge the communication gap between a wide variety of animals and humans using electronic communication aids such as joysticks that would allow animals to convey their thoughts through the use of specialized software⁸³ and through programs inspired by Dragon’s speech dictation tools that would translate vocalizations into understandable language.⁸⁴

B. Factoring for Different Types of Communication and Thought

⁷⁸ Luis von Ahn, Manuel Blum, & John Langford, Telling Humans and Computers Apart Automatically: How

⁷⁹ Marian Stump Dawkins, *Through Animal Eyes: What behavior Tells Us*, 100 APPLIED BEHAVIOR SCI. 4, 5-6 (2006).

⁸⁰ Susan Pearson, *Speaking Bodies, Speaking Minds: Animals, Language*, HISTORY, HISTORY & THEORY, Dec. 2013, at 91, 91.

⁸¹ *Id.* at 92.

⁸² W. A. HILLIX & DUANE RUMBAUGH, ANIMAL BODIES, HUMAN MINDS: APE, DOLPHIN, AND PARROT LANGUAGE SKILLS, 9-23 (2013).

⁸³ Roger K. Moore, Serge Thill & Ricard Marxer eds., *Vocal Interactivity in-and-between Humans, Animals, and Robots (VIHAR)*, 6 DAGSTAHL REPORTS 154, 154-162 (2017).*Id.* at

⁸⁴ *Id.* at 154-155.

People can often tell how another person is thinking due to cues such as body language and facial expression, but reading the thoughts of animals and being able to determine whether it is sentient to the level needed to have legal personhood granted would require a form of translation of thought and expression.⁸⁵ Computers could aid in helping determine what level of cognition that an animal has due to their ability to create numerous platforms for intelligence tests and their ability to receive information from a variety of input types.⁸⁶ Artificial intelligence (A.I.), human intelligence, and animal intelligence have common overlaps, but have different focuses and require different tests to gauge the complexity of their information processing abilities.⁸⁷ As an example of such intersections of intelligence, animals have been shown to understand depicted scenes as well as humans⁸⁸ and score as well as humans in facial recognition of individuals of the same species and of human faces and in determining emotional states based on expressions shown to them.⁸⁹ A.I. programs have been developed that are close to humans in facial recognition, but the programs have difficulty in some situations due to issues such as lighting, facial angles, and emotional expression.⁹⁰

V. Conclusion

Animals are not humans in their mental processes or physical forms. However, that does not mean that they do not deserve protection from ill treatment and emotional trauma. Animals and children have similar histories under the law and in society's treatment of them. Animals and children have been seen as being less than legal persons, been labeled as having limited value, worked in harsh and dangerous jobs, and exploited by medical research. Both animals and children have gained protections

⁸⁵ Steven Harnad, *Animal Sentience: The Other Minds Problem*, 1 ANIMAL SENTIENCE 1, 4-8 (2016).

⁸⁶ Stephan Kroner, *Intelligence Assessment with Computer Simulations*, 33 INTELLIGENCE 347, 348-351 (2005).

⁸⁷ Roman V. Yampolskiy, *Turing Test as a Defining Feature of AI-Completeness*, in XIN-SHE. YANG ED., ARTIFICIAL INTELLIGENCE, EVOLUTIONARY COMPUTING AND METAHEURISTICS, 11-12 (2012).

⁸⁸ *Id.* at 12.

⁸⁹ Dalila Bovet & Jacques Vauclair, *Picture Recognition in Animals and Humans*, 109 Behavioral Brain Research 143 (2000).

⁹⁰ Yanin Taizman et al., *Deepface: Closing the Gap to Human-Level Performance in Face Verification*, in *Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition*, 1701-1708 (2014).

from harms through the altruistic actions of others who sought to give voices to those who could not speak for themselves due to their lack of standing in the legal system.

Though animals and children share a number of similarities, only children have been granted opportunities to be determined as able to make their own decisions or to be declared as independent legal persons by courts. In order to gain protection under the law, animals must be seen as legal persons that have access to the courts themselves or through legal guardians. Animals have been found to have sophisticated cognitive abilities and a ranged of identifiable emotions that indicate are sentient and are able to understand complex orders and situations. Tests that examine whether an animal is self-aware and situationally consciousness on a level that would indicate they are legal persons, much like those to determine whether a child can be emancipated from parents or make medical decisions, could be developed to grant them legal protections greater than those granted to them under the current law. Granting legal personhood would not elevate animals to the same status as humans but would allow for greater legal protection for animals through the actions of guardians by allowing them standing to defend animals' rights.

Developing tests to determine whether an animal has intelligence on a level that would allow for the status of legal personhood to be granted to animals will require an organized effort by experts in the animal welfare, cognitive sciences, and legal fields. In order to create tests for legal personhood for animals based on those used by courts to make determinations for children, a deeper understanding of children's cognitive development must be reached so that a practical and uniform approach to making determinations as to a child's cognitive ability can be presented to the court system as a whole. Once the standardized test for the determinations of a child's mental cognition is established, the development of tests that would allow animals to be found to have the same levels of cognitive powers could be crafted based off the adopted cognitive criteria and tests for children.

Due to the variety of animals' physical forms and communication methods a single standardized test of their cognition would be all but impossible to develop. Creating the variety of tests that would be needed to allow opportunities for the broadest range of animals to be tested possible while adhering to a

set of cognitive standards would takes years of effort and study even with the assistance of A.I. programs. To be able to help animals currently being harmed or threatened, and to establish legal and scientific precedents, cognitive tests could be developed for animals that have been studied and are similar enough to humans, such as great apes and other primates, that issues such as accounted for physical differences or barriers in communication could be minimized. Working from the tests for primates, tests for animals such as dolphins, elephants, and other animals recognized for their intelligence could be developed and established with the legal system. Using a systematic process based off the previous findings of cognitive studies and established testing criteria, tests could be developed to include more animals and kinds of communication between animals and humans till the maximum number of cognitively complex animals are given the opportunity to be granted legal personhood and the protection of the law.