SUPREME COURT OF THE STATE OF NEW YORK COUNTY OF NEW YORK

In the Matter of a Proceeding under Article 70 of the CPLR for a Writ of Habeas Corpus,

THE NONHUMAN RIGHTS PROJECT, INC., on behalf of KIKO,

Petitioner,

-against-

CARMEN PRESTI, individually and as an officer and director of The Primate Sanctuary, Inc., CHRISTIE E. PRESTI, individually and as an officer and director of The Primate Sanctuary, Inc., and THE PRIMATE SANCTUARY, INC.,

SUPPLEMENTAL
AFFIDAVIT OF JAMES
R. ANDERSON

Index No.



COUNTRY OF)
STATE OF) ss
CITY OF))

James R. Anderson being duly sworn, deposes and says:

Introduction and Qualifications

1. My name is James R. Anderson. I live and work in Kyoto, Japan. I graduated with a Bachelor of Science in Psychology from the University of Stirling (Scotland) in 1977, and a Ph.D. in Psychology from the University of Stirling in 1982.

- 2. I submit this Affidavit in support of Petitioner, The Nonhuman Rights Project, Inc.'s ("NhRP"), petition for a writ of habeas corpus on behalf of Kiko. I am a non-party to this proceeding.
- 3. I am a faculty member at Kyoto University. My current position is Professor in Psychology, in the Graduate School of Letters. From 1995 until 2014, I taught Introductory Psychology, Animal Behaviour, and Developmental and Comparative Psychology at the University of Stirling. I have also taught courses on Animal Behaviour and Animal Welfare at the Universities of Edinburgh (Scotland) and Strasbourg (France). Since April 2014, I teach courses on nonhuman primate biology and behaviour, and comparative psychology, at Kyoto University.
- 4. I have conducted behavioural research on wild chimpanzees in West Africa (Senegal: 1977, 1979; Liberia: 1982), and supervised graduate students who have studied chimpanzees with Japanese colleagues in Guinea (West Africa: 1999-2003; 2004-2005). I have also directly conducted research and have supervised graduate students' research on captive chimpanzees in Japan and Scotland.
- 5. Since 1987, I have been a scientific advisor to the Primatology Centre of Strasbourg University (France). I have served on the editorial boards of the following scientific journals: Journal of Comparative Psychology (1991-1994), Primatologie (1997-2007), Current Psychology Letters: Brain, Behaviour & Cognition (1998-2011), American Journal of Primatology (2006-2013), Primates (2002-present), and Animal Cognition (2013-present). I have conducted peer reviews of more than 500 manuscripts submitted to academic journals in psychology, biology, anthropology, and general science.

- 6. I am a specialist in the behaviour of nonhuman primates, with particular focus on learning and social cognition. My behavioural studies have been on multiple species of prosimians, New and Old World monkeys, and apes. In addition to field research on baboons and chimpanzees in West Africa, and macaques in southern India, I have studied several primate species in laboratories and zoological parks. Distinctions and awards include nomination for the Bronze Medal, Société pour le Progrès de l'Homme, and Auxiliary Award, O.P.A.L. (Ouevre pour la Protection des Animaux de Laboratoire).
- 7. I have co-edited 4 volumes: *Primates: Recherches Actuelles* (1990, Masson, Paris), and *Current Primatology*, Vols. 1, 2 and 3 (1994, Université Louis Pasteur, Strasbourg).
- 8. My publications include over 200 articles on learning, behaviour, ecology, and welfare of prosimians, monkeys and apes, including over 100 peer-reviewed empirical and review articles in scientific journals including: American Journal of Primatology, Animal Behaviour, Animal Cognition, Animal Welfare, Cognition, Current Biology, Folia Primatologica, Journal of Comparative Psychology, Journal of Human Evolution, Nature Communications, and PLoS Biology. I have also written many chapters for edited volumes covering a range of topics ranging from animal husbandry and welfare to consciousness and cognition. Specific topics include: communication, abnormal behaviour, environmental enrichment, husbandry, attachment formation, correlates of social dominance, responses to mirror-image stimulation, self-awareness, tool-use, social organisation, sleep, learning and memory, effects of ageing, behavioural inhibition and self-control, and third-party social evaluation in primates. I have made several documentary films about primate behaviour, and several of my research projects have received international media attention (radio, television, printed press, internet).

- 9. I have given invited lectures or been invited speaker in symposia in psychology and primatology in Belgium, England, France, Germany, Italy, Japan, Netherlands, Scotland, Switzerland, and USA. I have served as External Examiner for doctoral theses on primate behaviour in Australia, Denmark, England, France, Germany, The Netherlands, and Scotland.
- 10. My Curriculum Vitae sets forth my educational background and experience and is annexed to my original Affidavit, filed herewith.

Basis for Opinions

- 11. The opinions in this Affidavit are based on my own work as well as accumulated knowledge from over 35 years of hands-on research and teaching about the behaviour of nonhuman primates; this includes my knowledge of peer-reviewed literature about primatology published in respected journals, periodicals and scholarly books.
 - 12. A full reference list of peer-reviewed literature cited herein is annexed hereto.

Opinions

- 13. The close evolutionary relationship between chimpanzees (and the closely related bonobos) and humans is evident not only in terms of physical structure but also in behaviour, emotional and mental processes. No other species comes so close to humans in self-awareness and language abilities, and in richness and diversity of behaviours such as tool-use, gestural communication, social learning, social awareness, and reactions to death.
- 14. Chimpanzees were the first nonhuman species shown to be capable of mirror-mediated self-recognition (Gallup, 1970). Among nonhumans, the evidence for self-recognition widely accepted to require the ability to hold a mental representation of what one looks like from another visual perspective -- is indisputably strongest for chimpanzees and other great apes (Anderson & Gallup, 2011; 2015). The developmental emergence of self-recognition in

chimpanzees is similar to that in humans (Lin, Bard & Anderson, 1992). Furthermore, as in humans, self-recognition in adult chimpanzees is highly stable across time, with some decline in old age (de Veer et al., 2003).

15. Chimpanzees show "community concern," and concern for individuals. The capacity for self-recognition, which indicates cognitive self-awareness, has been linked to empathic abilities (Gallup, 1982), defined as identifying with and understanding another's situation, feelings and motives. Chimpanzees are capable of highly developed empathic abilities (de Waal, 1990). They surpass other species in terms of concern for others' welfare, as shown when individuals console an unrelated victim of aggression by a third-party (de Waal & Aureli, 1996). High-ranking individuals in groups may take on the role of policing – defined as impartial interventions in conflicts by bystanders – to ensure group stability (von Rohr et al., 2012). Wild chimpanzees may adopt orphans, even if the latter are not genetically related to the adopter (Boesch et al., 2010). Individuals may make numerous behavioural adjustments -- sometimes markedly so -- in order to ensure the welfare of injured or disabled members of the group (Matsumoto et al., 2015).

16. Chimpanzees assume specific duties and responsibilities within their society. When crossing a potentially dangerous road, stronger and more capable adult males investigate the situation before more vulnerable group-members, waiting by the roadside, venture onto the road. The males remain vigilant while taking up positions at the front and rear of the procession (Hockings, Anderson & Matsuzawa, 2006). At Bossou, Guinea, adult male chimpanzees are significantly more likely than other age-sex classes to raid human-cultivated crops near villages; these foods are then taken back into the forest and shared with more timid capable members of the community, who hang back and allow the males to raid (Hockings et al., 2007). In many

localities in Africa, adult male chimpanzees regularly patrol the boundaries of their community's territory; encounters with members of a neighbouring community may result in violent, even lethal aggression. Males engage in patrols with partners who are especially likely to be other males with whom individuals groom and form intra-community coalitions, in other words, individuals that can be trusted for support in the event of aggression breaking out (Watts & Mitani, 2001) (see below for experimental evidence for assessment of trustworthiness). Wild chimpanzees will call to warn approaching friends about the presence of a potentially dangerous object that the latter is unaware of (Schel et al., 2013). These examples indicate the existence of well-defined roles within the community and mutual expectations about how individuals should behave in a range of situations.



17. Chimpanzees cooperate, and understand each other's roles. Experiments in captivity have established that chimpanzees can be trained (Crawford, 1937) or can learn spontaneously (Melis, Hare & Tomasello, 2006a; Suchak et al., 2014) to work collaboratively with at least one other individual to solve a common problem that cannot be solved by a single individual. After experiencing working alongside two different collaborators, chimpanzees prefer to work with a collaborator who has proved more effective in the past (Melis et al., 2006b); thus they attribute different degrees of competence to other individuals. In many cooperation tasks the outcome is that each partner receives a reward such as food. However, immediate reward is not a prerequisite for cooperation: if one chimpanzee sees another trying to solve a problem and can also see the problem, the former may provide the precise tool that the latter requires, especially but not only - if the latter requests the tool (Yamamoto, Humle & Tanaka, 2012; Melis & Tomasello, 2013). Notably, such helping persists even in the absence of reciprocation by the tool-user: chimpanzees continue to help partners in need of help despite receiving no obvious

reward (Yamamoto, Humle & Tanaka, 2009). Similarly, when young chimpanzees observe a human trying to retrieve an out-of-reach object, they sometimes spontaneously retrieve the object and give it to the human although they receive no reward for doing so (Warneken & Tomasello, 2006, Warneken et al., 2007). Chimpanzees will also perform a newly acquired skill (pulling a chain to open a door) so that another chimpanzee can gain access to food; again, the helper obtains no obvious payoff in this situation (Warneken et al., 2007).

- 18. Chimpanzees reward others, and keep track of others' acts and outcomes. Wild chimpanzees cooperate when hunting. When a subgroup of chimpanzees moves into hunting mode in the presence of monkeys, individuals take up positions in trees or on the ground corresponding to different roles such as chaser and blocker. If the hunt is successful, a monkey will eventually be caught and killed by one of the group of hunters. In the Tai Forest, all participants in a successful hunt then receive a share of the meat from the possessor (Boesch and Boesch-Acherman, 2000). A study of more than 4,600 interactions over food in a captive chimpanzee group recorded remarkably balanced exchanges of food between individuals: not only did food exchanges occur in both directions, individuals were more likely to share with another chimpanzee who had groomed them earlier that day. The observed pattern of grooming and food transfers suggested the presence of reciprocal obligations (de Waal, 1989).
- 19. In captivity, when presented with an ultimatum game in which both partners needed to cooperate in order to split available rewards equally, chimpanzees and 3-year-old human children behave similarly: both perform in a way that ensures a fair distribution of rewards (Proctor et al., 2013). Other studies have shown that human adults also behave fairly in similar situations. In a trust game in which two chimpanzees can take a small reward for themselves or send a larger reward to a partner and trust that the partner will return some of it,

chimpanzees spontaneously trust each other. Furthermore, they flexibly adjust their actions in the game depending on the degree of trustworthiness of the partner (Engelmann, Hermann and Tomasello, 2015).

- 20. Chimpanzees prefer fair exchanges. In the well-known inequity aversion procedure, a subject and a partner each exchange a token with an experimenter, who in turn rewards each individual with a food item. Two chimpanzees will take turns exchanging with the experimenter as long as the value of the reward that each receives is the same. But when one chimpanzee sees the partner receive a higher-value reward for completing the same exchange (e.g., partner receives a grape, subject receives a small piece of cucumber), she is likely to either refuse to accept the reward or refuse to return the token. In other words, they are intolerant of unfair treatment. Furthermore, as in humans, chimpanzees' responses to reward inequity may vary with the quality of the relationship between subject and partner: they react less emotionally to unfairness if the partner is a close friend or relative (Brosnan, Schiff, & de Waal, 2005).
- 21. Chimpanzees readily understand social roles and intentions. In Premack and Woodruff's (1978) pioneering study, a chimpanzee was presented with videotaped scenes of a human actor faced with different problems, for example trying to reach inaccessible food, or trying to listen to a gramophone record. When given a choice between a photograph of the solution to a problem (e.g., a stick with which to reach the food, or record player plugged in) alongside decoy photographs (e.g., irrelevant objects, or a gramophone cable plugged in but cut), the chimpanzee consistently chose the correct solution, i.e., that which the actor in the videos required to solve his problem.
- 22. Chimpanzees distinguish between individuals who have harmful versus prosocial intentions. They will point toward the one of two locations that is baited with hidden food if this

results in a naïve, cooperative human finding the food and sharing it with the chimpanzee. (Chimpanzees in the wild have a communicative repertoire of more than 60 distinct nonverbal gestures: Hobaiter and Byrne, 2014). But they also learn to point deceptively in the presence of a non-cooperative, selfish human – deliberately directing him toward the wrong location (Woodruff & Premack, 1979). Chimpanzees discriminate between prosocial and antisocial individuals based not only on how those individuals behave toward the chimpanzees themselves, but also based on their treatment toward third parties: generous individuals are preferred to selfish individuals (Subiaul et al., 2008).

- 23. Chimpanzees can adapt quickly to role-reversal in cooperative tasks. In one study, chimpanzees were either trained to follow a human's pointing gesture in order to find food, or trained to gesture to direct a naïve human toward hidden food. Once this relationship was established, the roles were reversed: indicator chimpanzees now became the recipients of the communicative gesture, while previous recipients were now required to actively point for the human. Unlike monkeys, for whom spontaneous role reversal appears very difficult, three quarters of the chimpanzees tested showed immediate comprehension of the changing roles and performed appropriately (Povinelli, Nelson and Boysen, 1992). In conversations with a human, American Sign Language-trained chimpanzees took turns appropriately, and as in humans their conversational turn-taking developed with experience (Hartmann, 2011).
- 24. Based upon my research and knowledge of nonhuman primate behaviour, including the studies reviewed here, I conclude that chimpanzees understand their own and others' roles in their daily interactions. They show concern for others' welfare, and they have expectations about appropriate behaviour in a range of situations, i.e. social norms. This applies to their interactions with conspecifics, and their interactions with humans. I believe that the

weight of evidence suggests the existence of duties and responsibilities within chimpanzee communities.

James R. Anderson

Sworn to before me this 16 day of November, 2015

Notary Public





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二茶記

嘱託人 ANDERSON JAMES RUSSELL は、本職の面前で添付書面に 署名した。

I. hereby certify that this document was signed before me and that the signature appearing on same is the true signature of ANDERSON JAMES RUSSELL.

よって、これを認証する。

平成27年 11月18 日、本公証人役場において

大阪市中央区安土町3丁目4番10号

大阪法務局所属公証人

Notary



所於第二种党

証

明

kenji Sugimori

上記署名は、大阪法務局所属公証人の署名に相違ないものであり、かつ、その押印は、真実のものであることを証明する。

平成27年 11 月 18 日

大阪法務局長

富田一彦



APOSTILLE

(Convention de La Haye du 5 octobre 1961)

1. Country: JAPAN

This public document

- 2. has been signed by Kenji Sgimori
- 3. acting in the capacity of Notary of the Osaka Legal Affairs Bureau
- 4. bears the seal/stamp of Kenji Sugimori , Notary Certified

5. at Osaka

6. NOV. 18. 2015

- 7. by the Ministry of Foreign Affairs
- 8. 15-No. 004636
- 9. Seal/stamp:

10. Signature



Naomi ASANO

For the Minister for Foreign Affairs