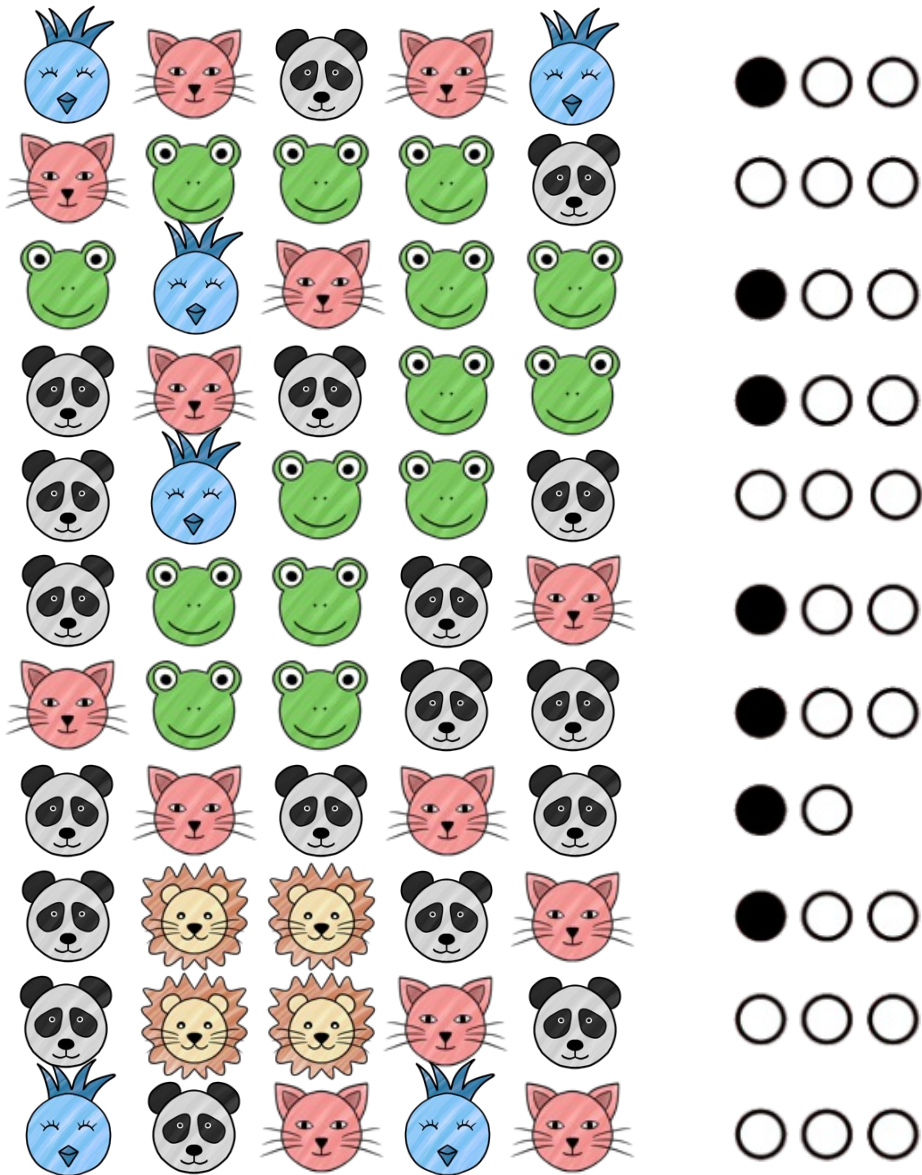


Jak wymieniać się nerkami i innymi przedmiotami

Oskar Skibski

Uniwersytet Warszawski

SMP, 23.08.2024



Jak wymieniać się nerkami i innymi przedmiotami

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Wymiana nerek



Wymiana nerek



>100 000 osób na liście
oczekujących w USA

Wymiana nerek



>100 000 osób na liście
oczekujących w USA

17-18 tys. przeszczepów na
rok od zmarłych dawców

Wymiana nerek

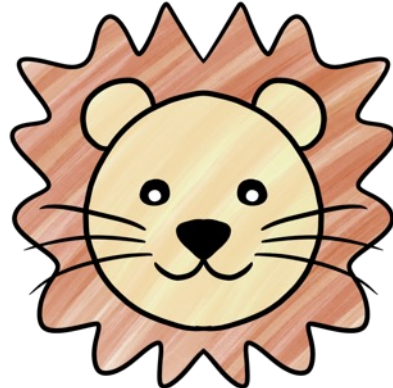


>100 000 osób na liście
oczekujących w USA

17-18 tys. przeszczepów na
rok od zmarłych dawców

Czas oczekiwania: 3-6 lat

Wymiana nerek

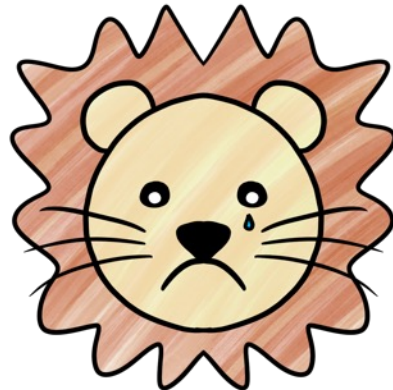


Wymiana nerek

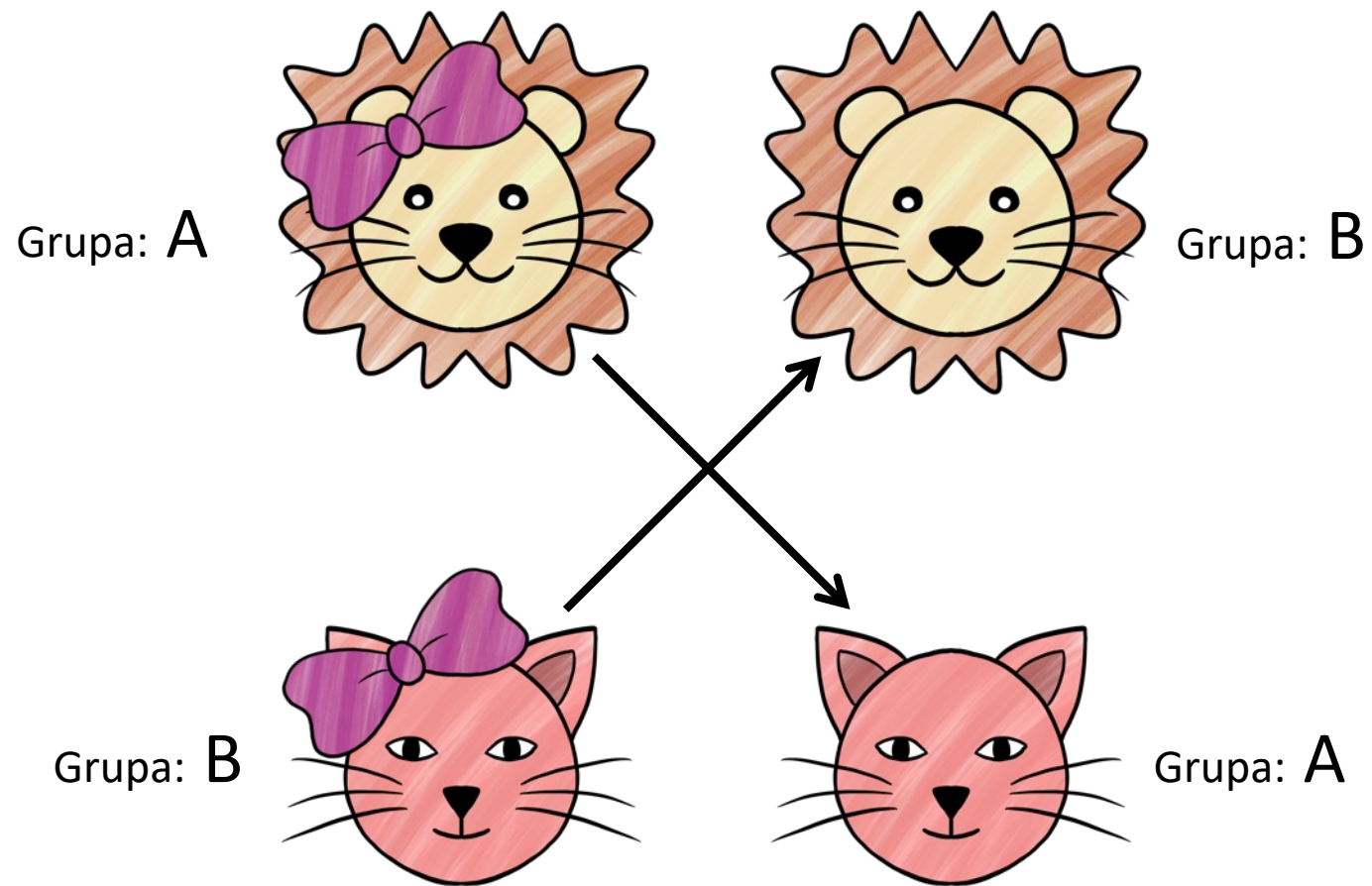
Grupa: **A**



Grupa: **B**



Wymiana nerek

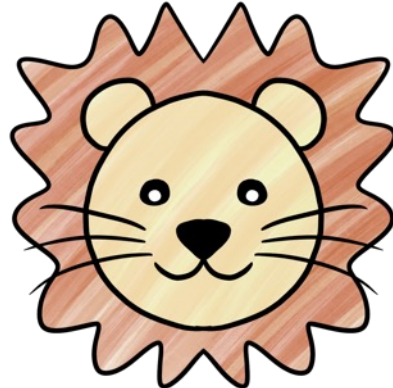


Wymiana nerek

Grupa: **A**



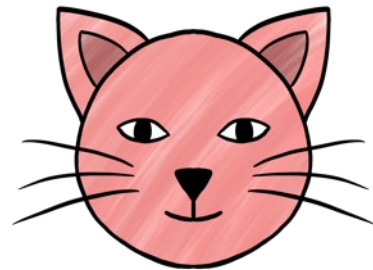
Grupa: **B**



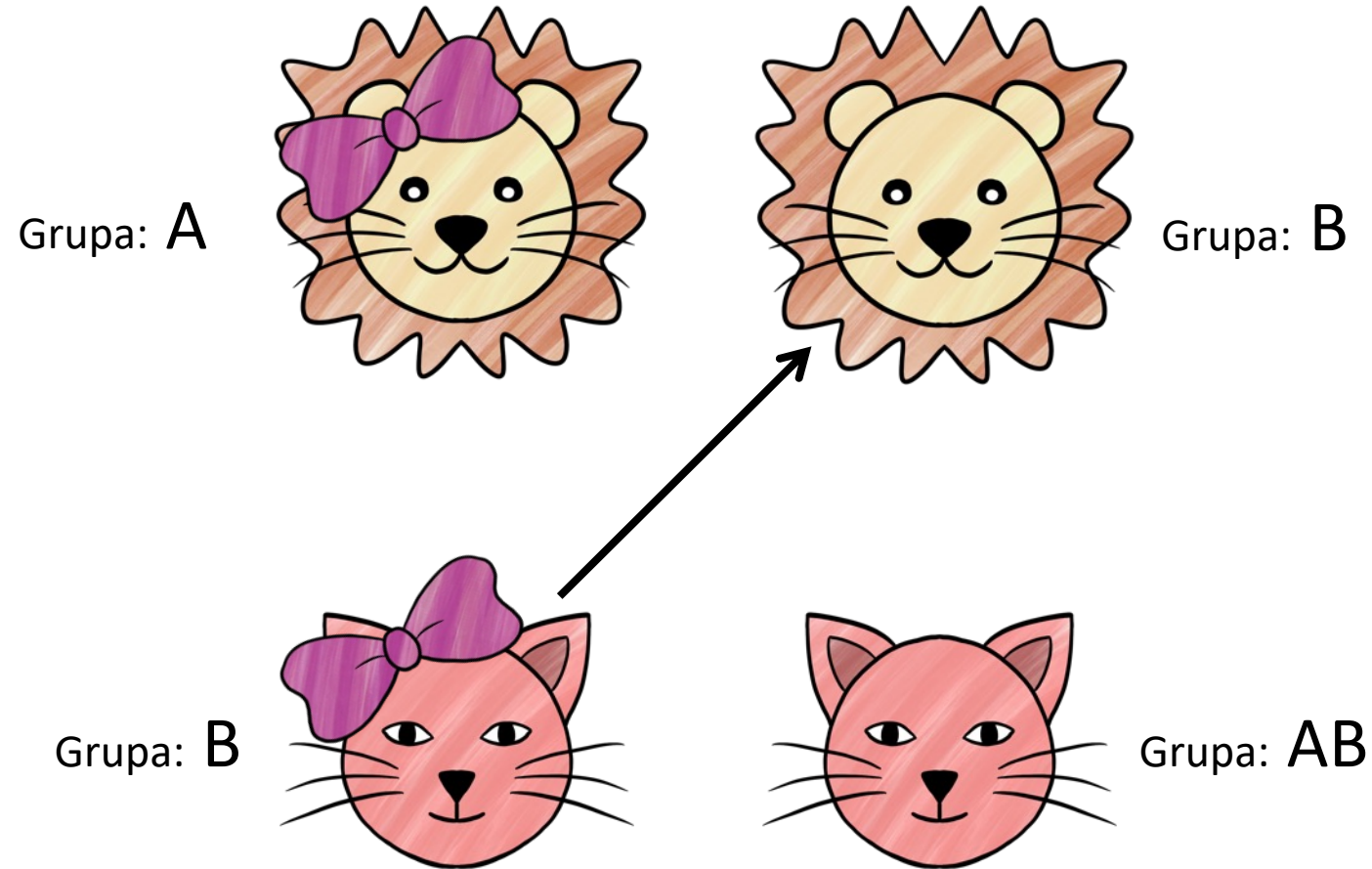
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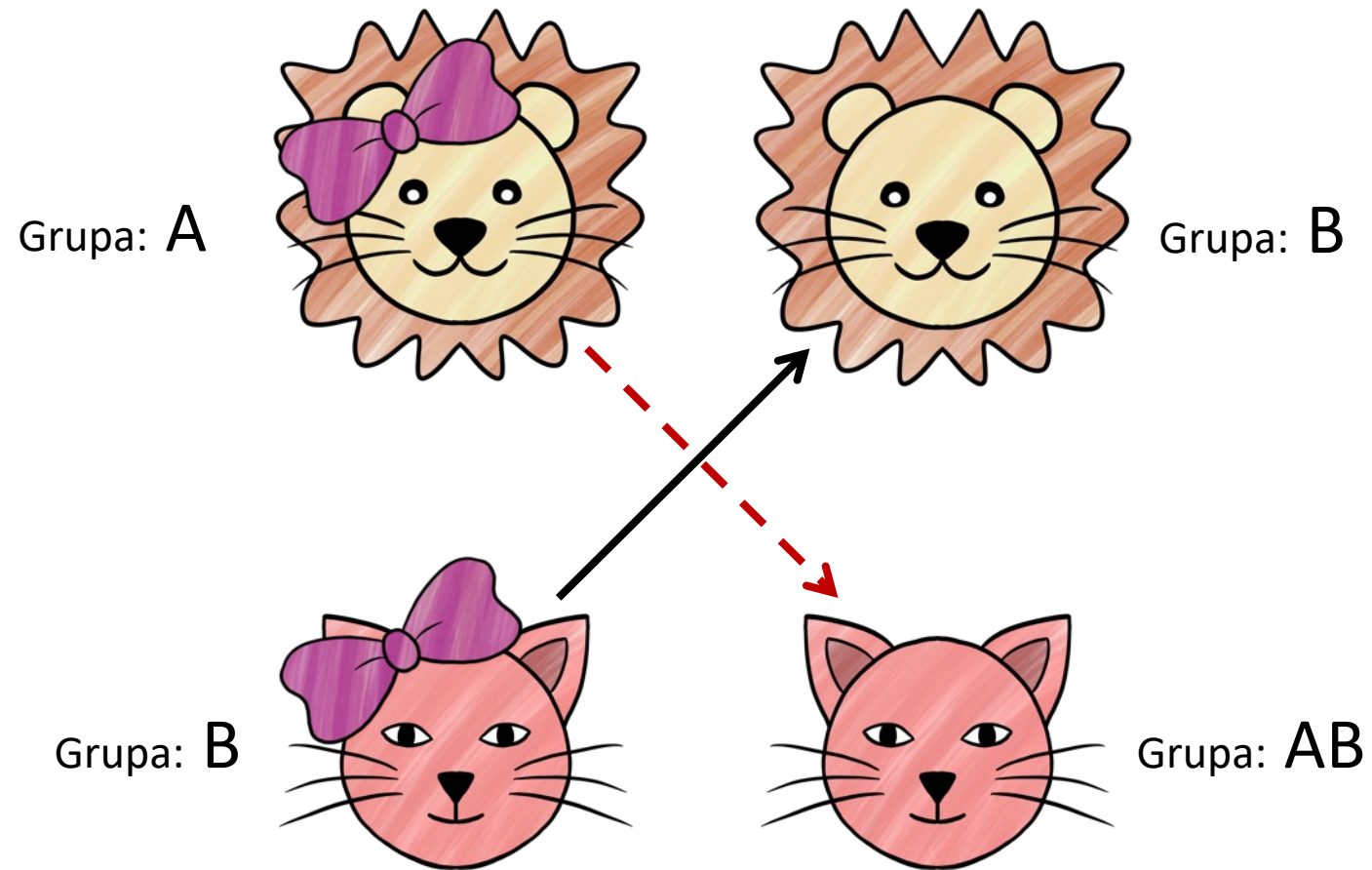
Grupa: **AB**



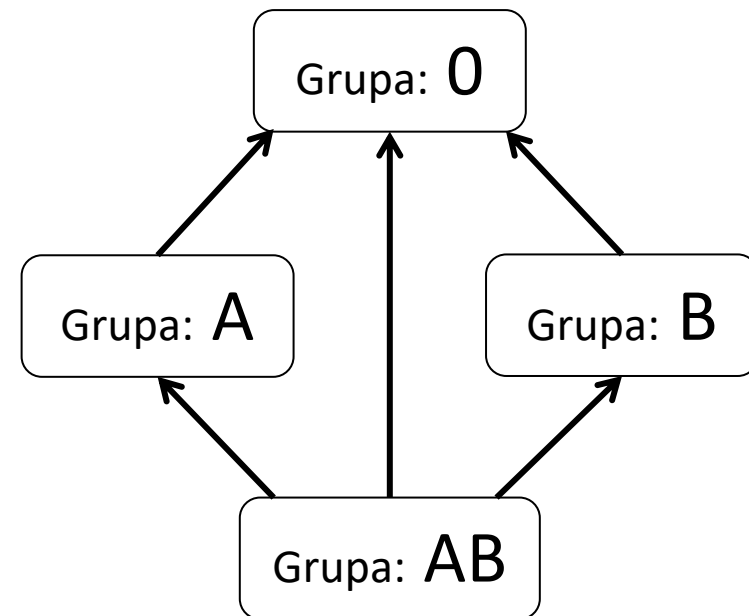
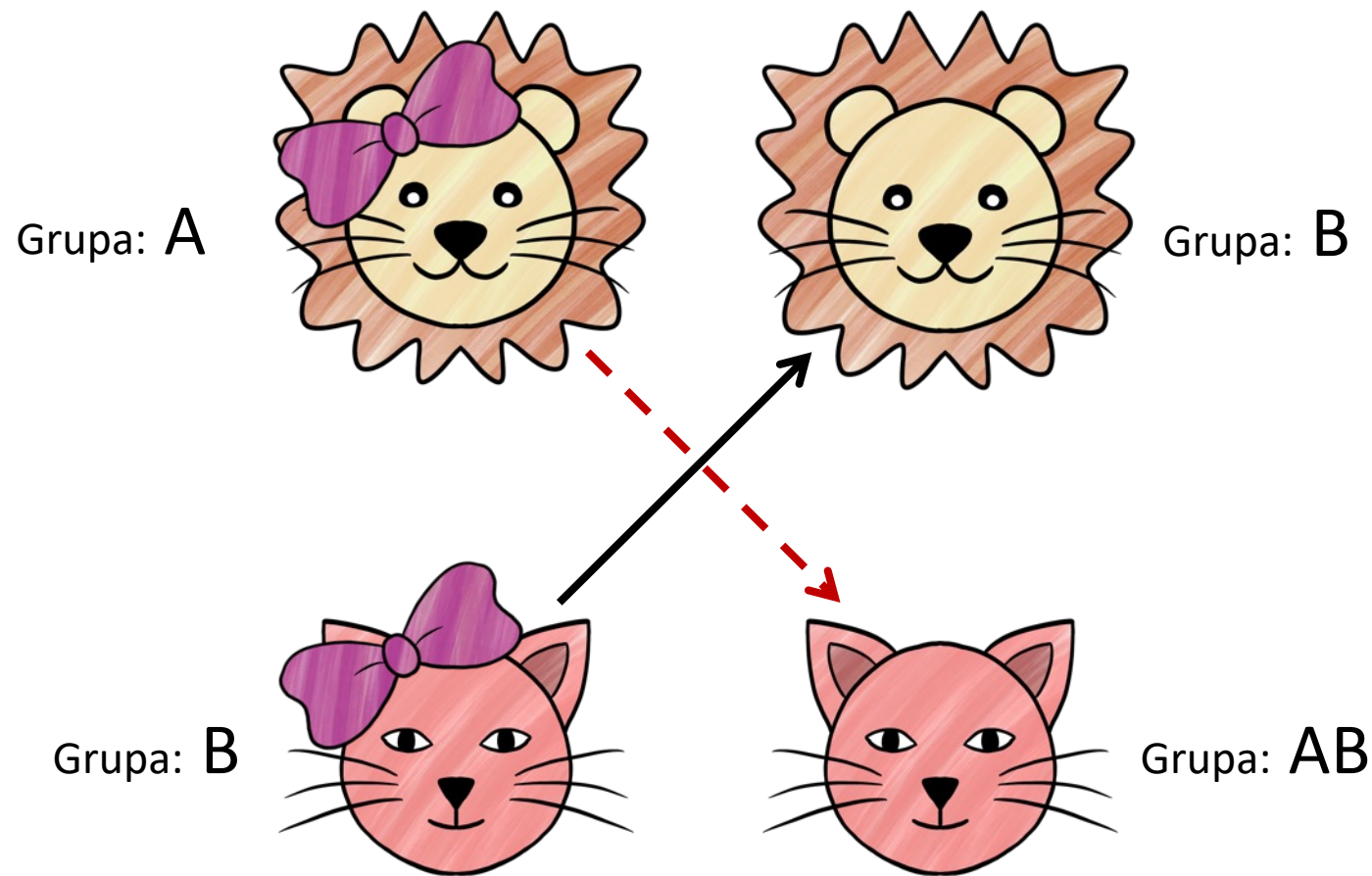
Wymiana nerek



Wymiana nerek

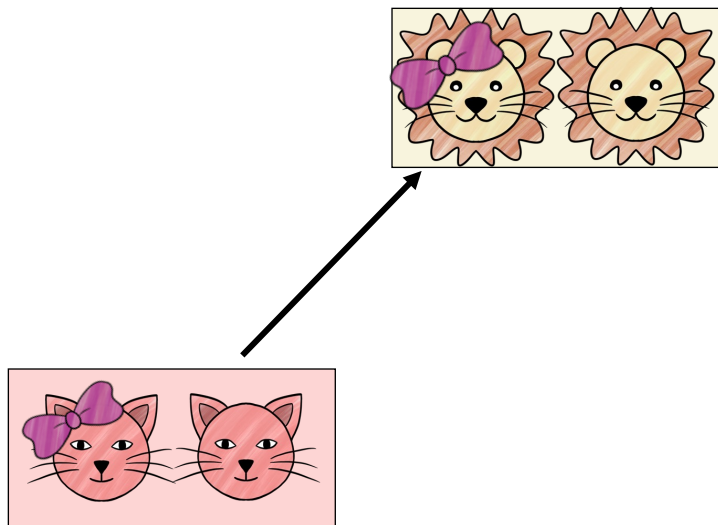


Wymiana nerek

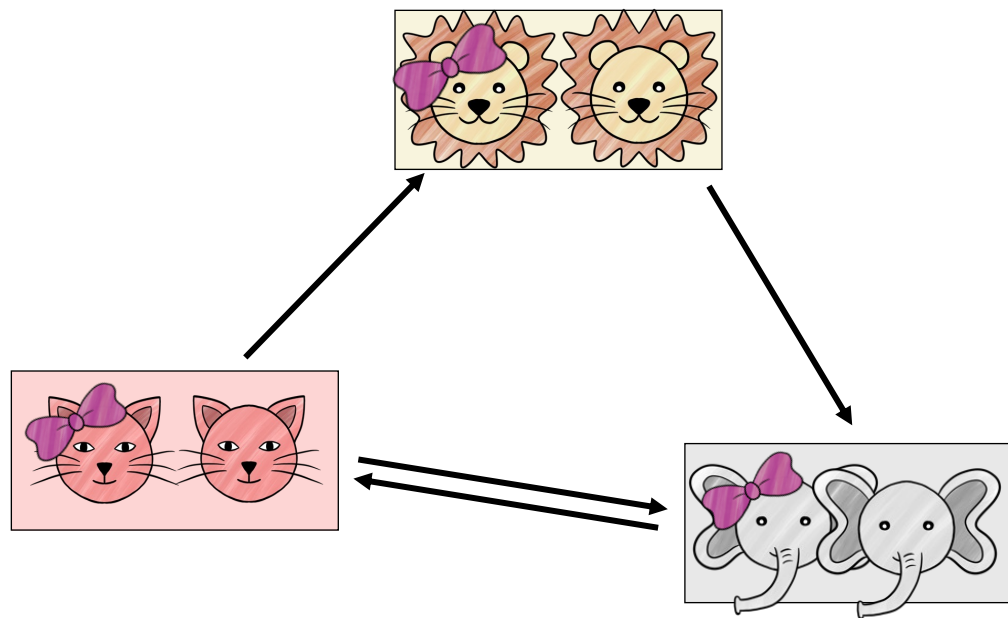


jak nie mamy antygeny,
nie możemy przyjąć nerki
od osoby z tym antygenem

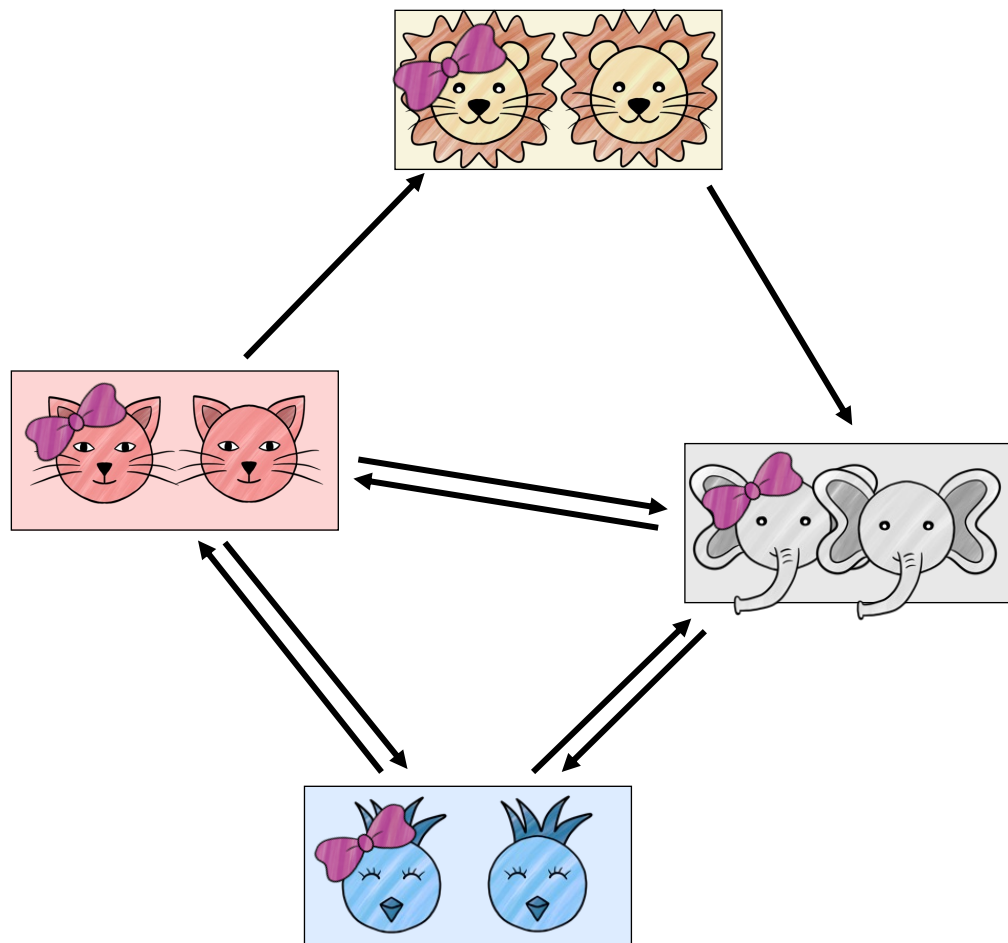
Wymiana nerek



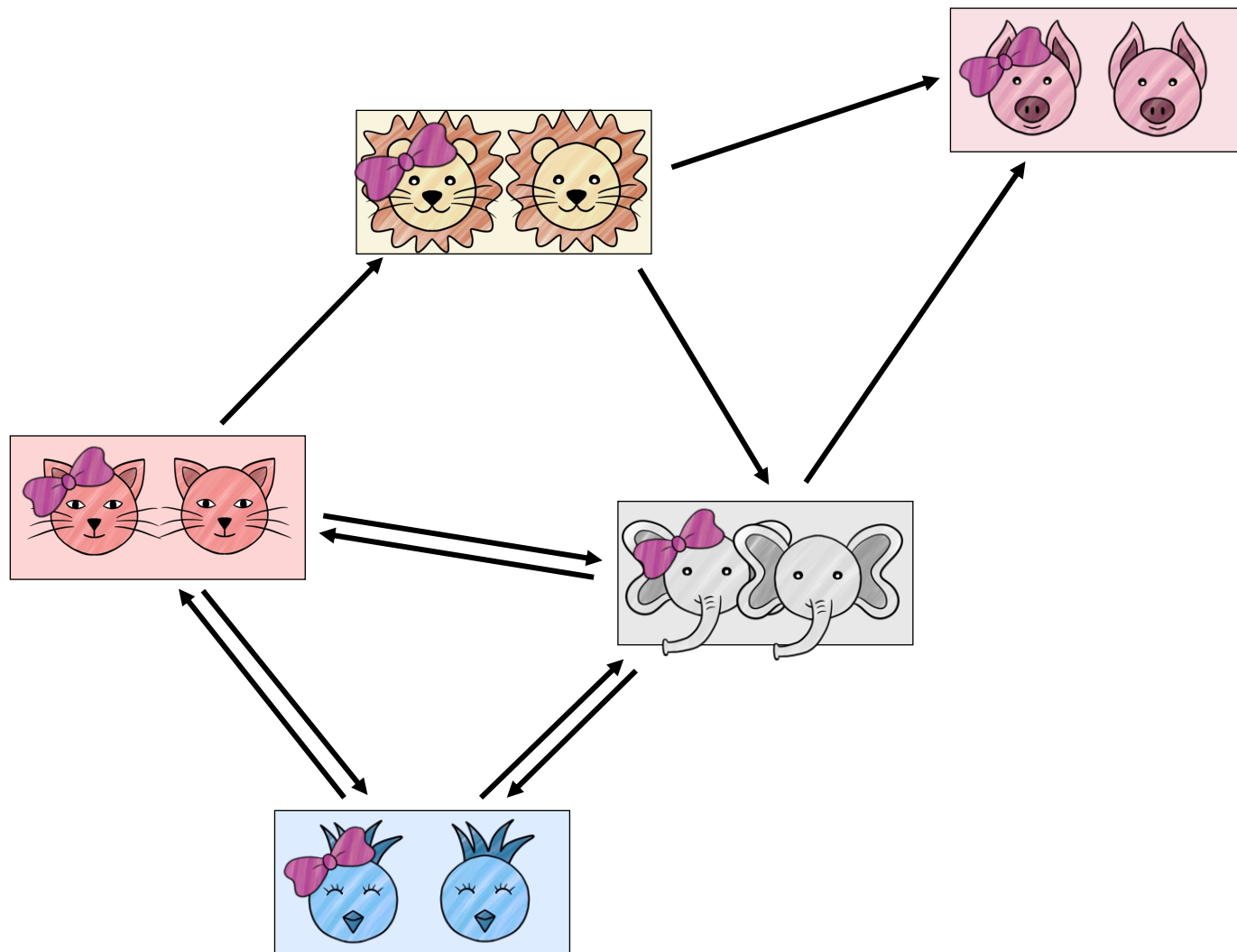
Wymiana nerek



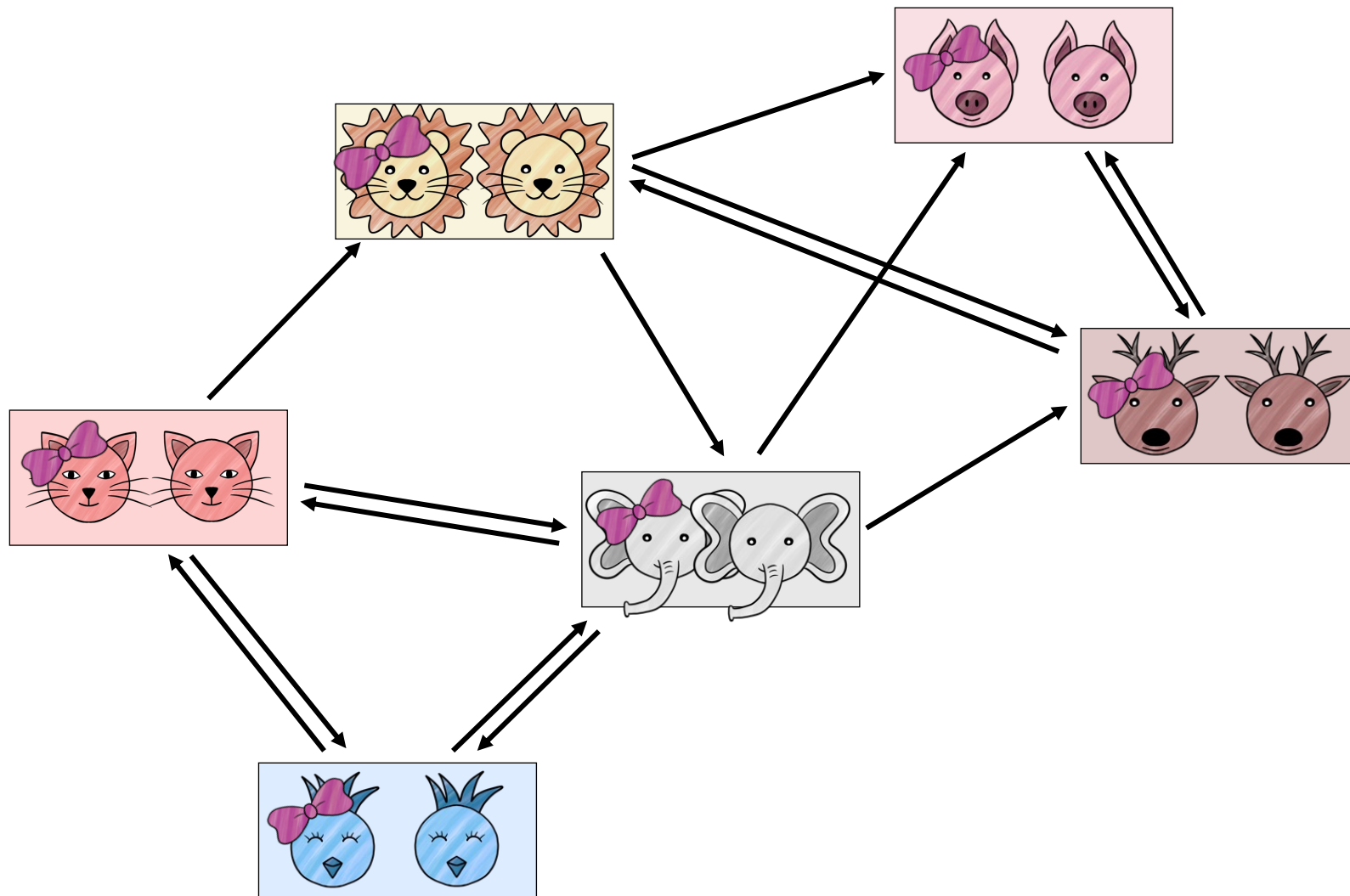
Wymiana nerek



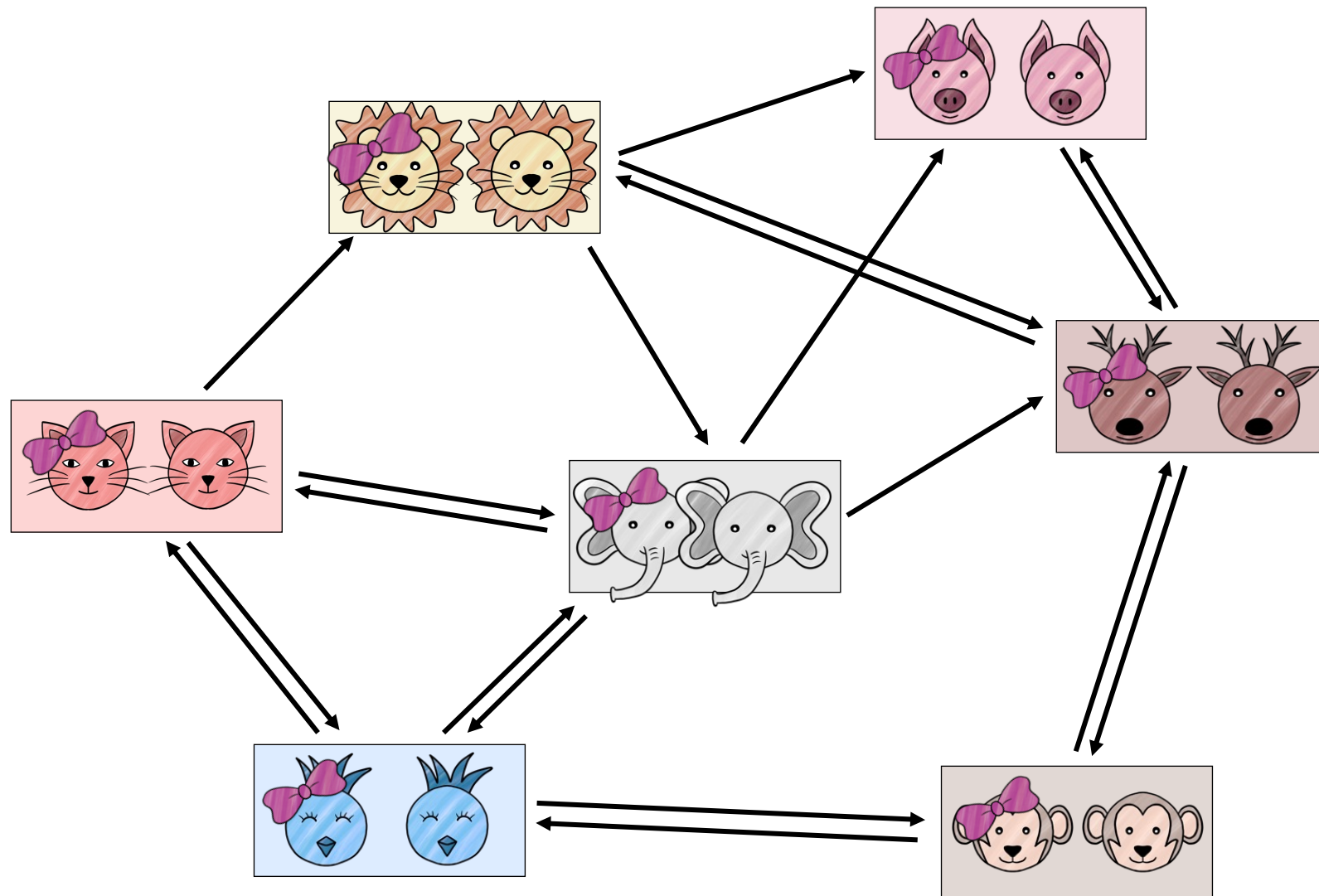
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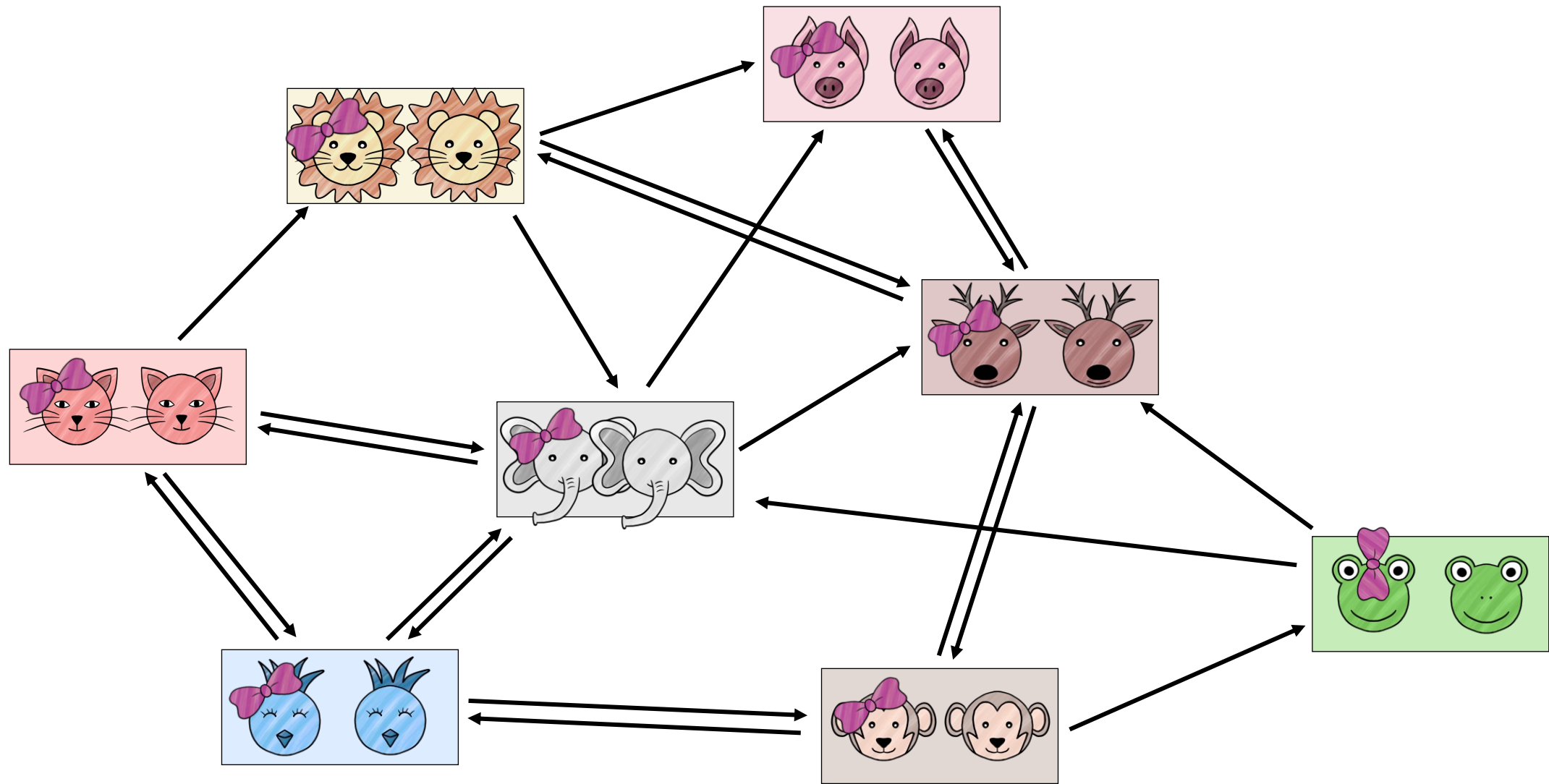
Wymiana nerek



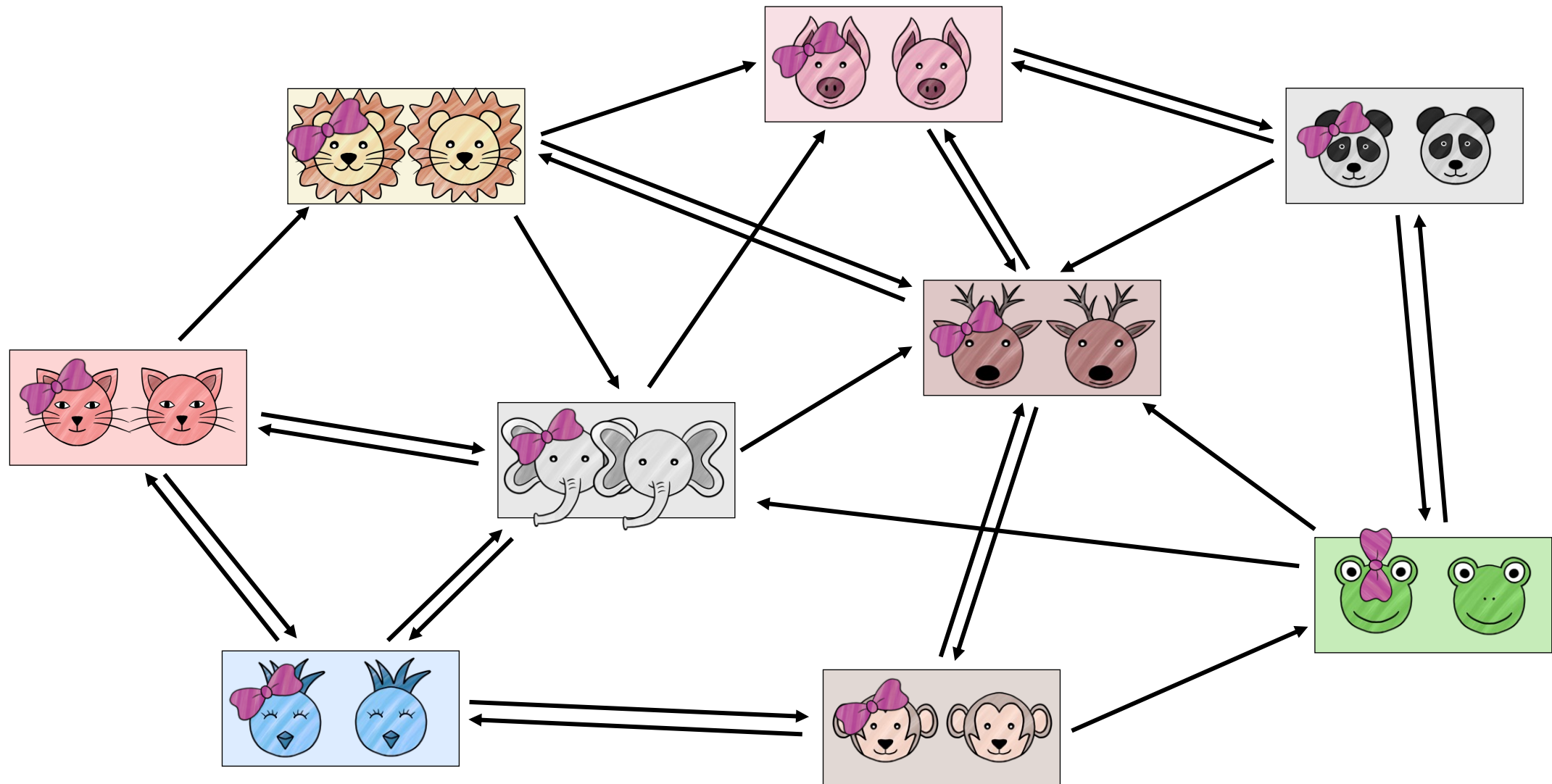
Wymiana nerek



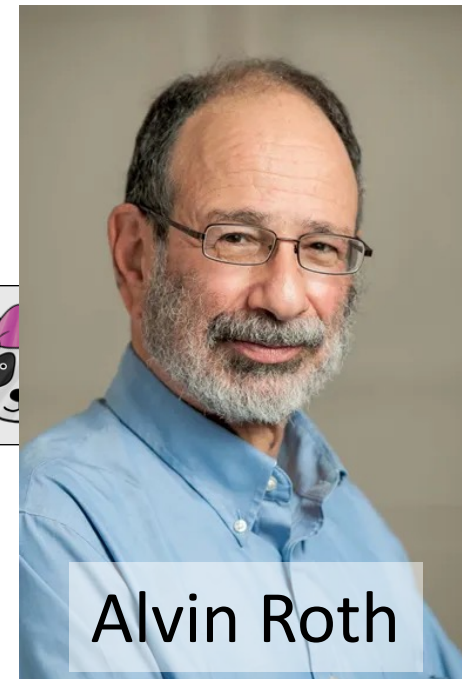
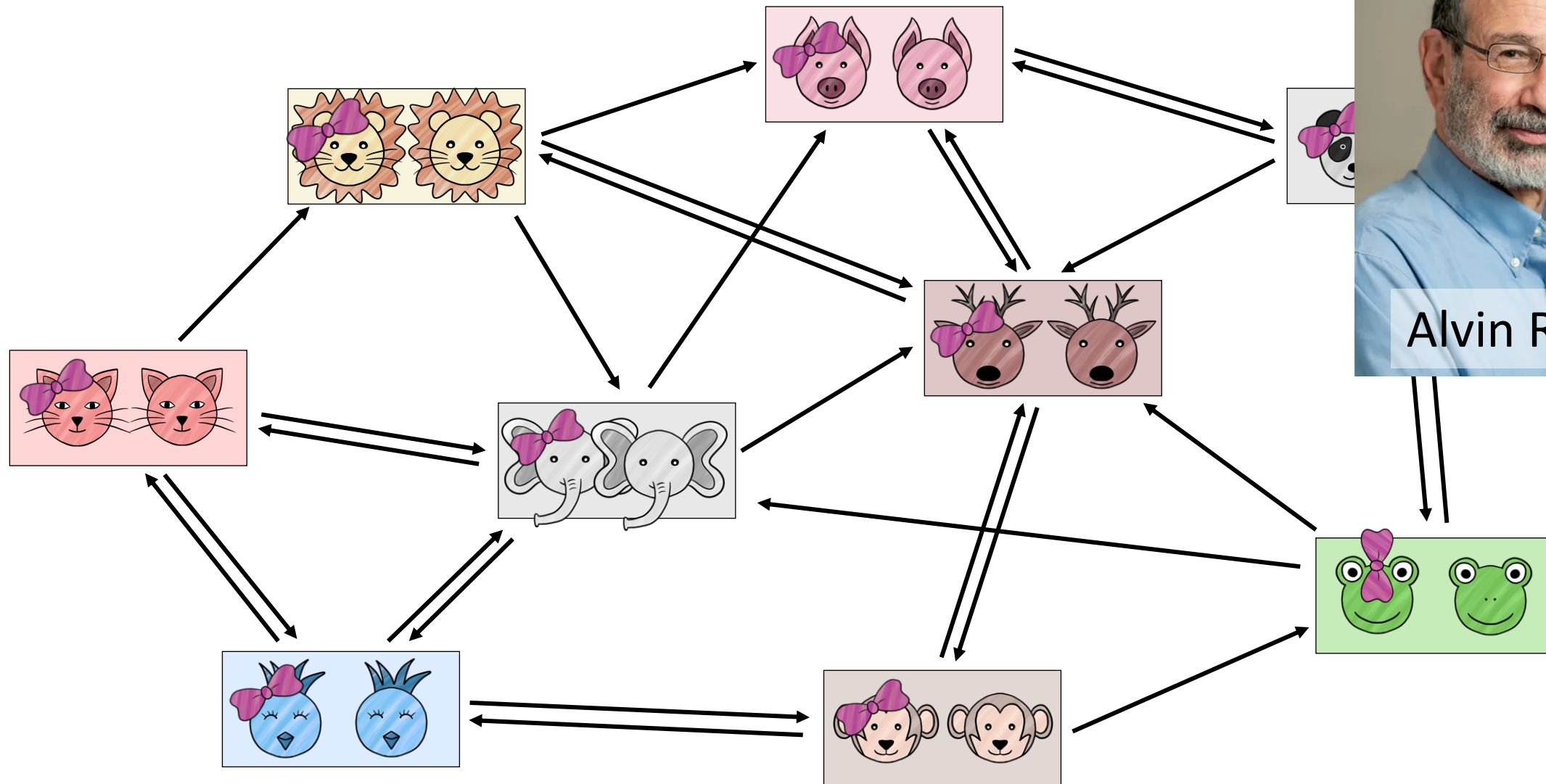
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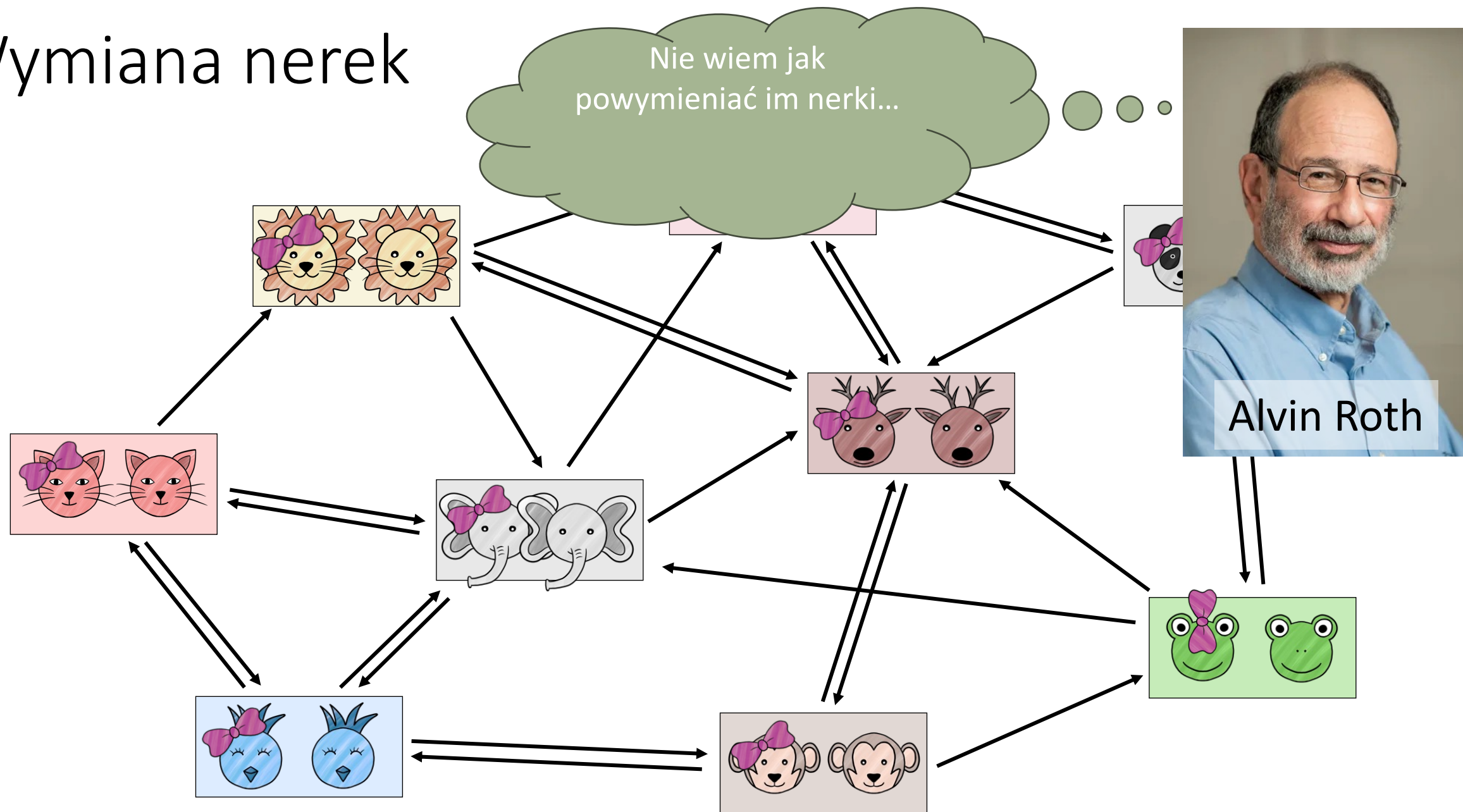
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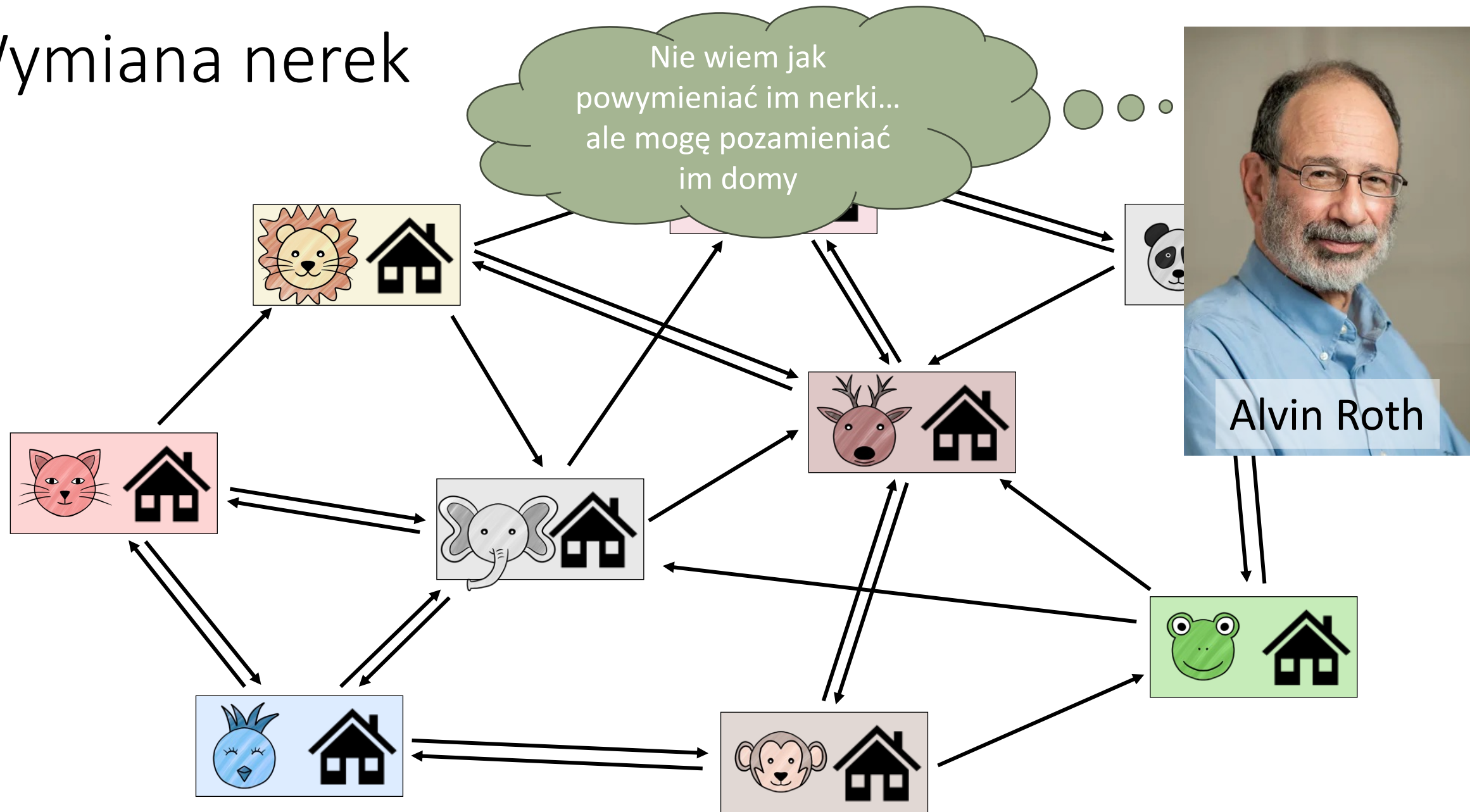
Wymiana nerek



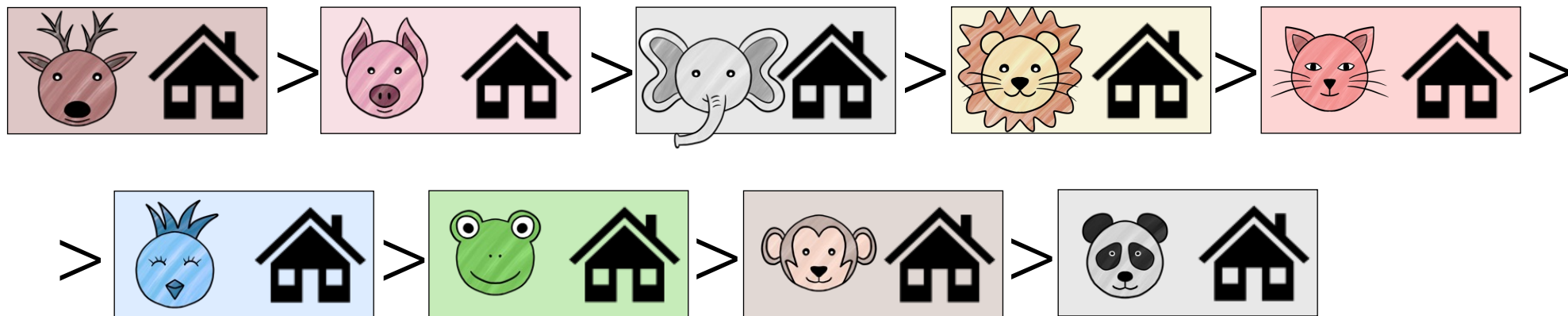
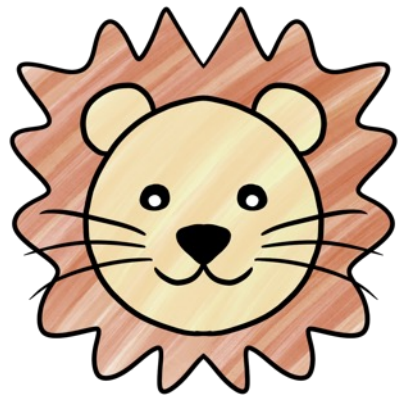
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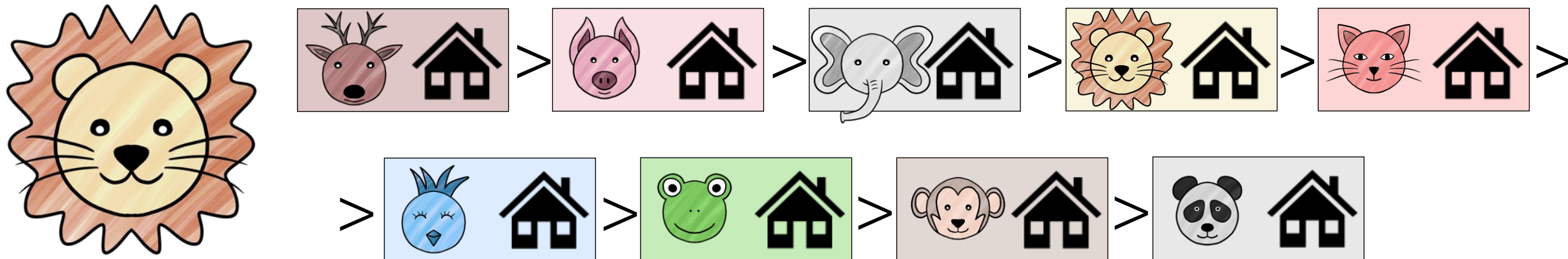
Wymiana nerek



Wymiana domów

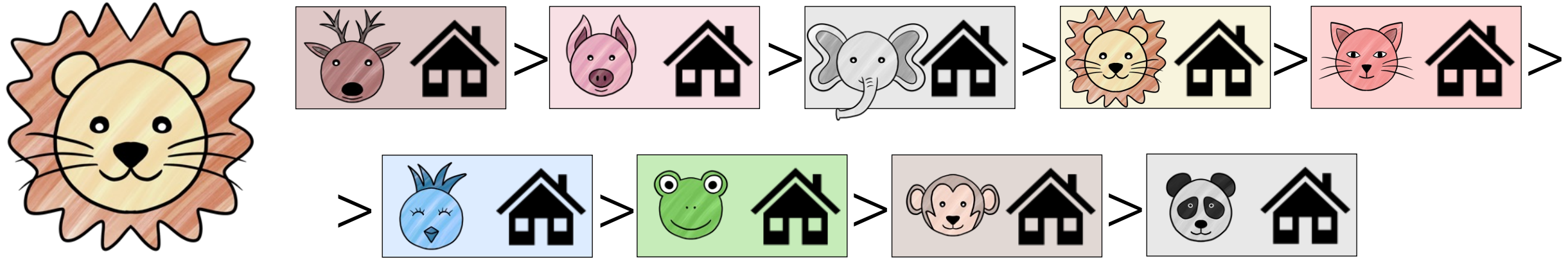


Wymiana domów



Czego chcemy od systemu?

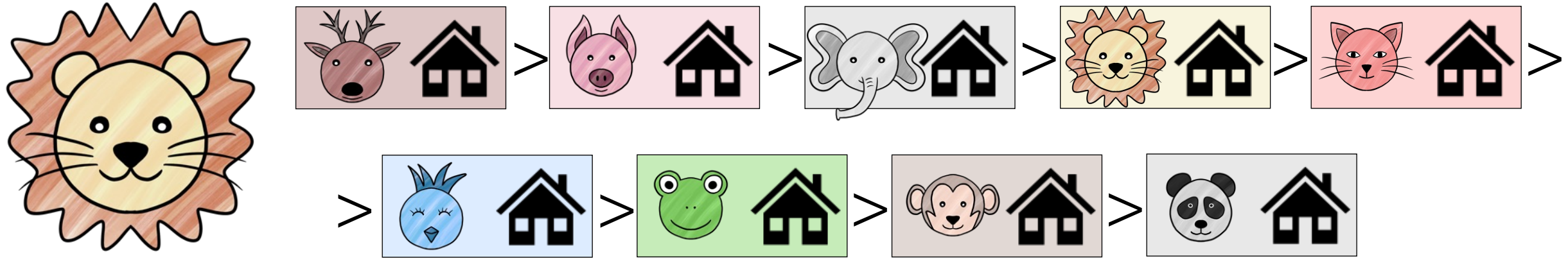
Wymiana domów



Czego chcemy od systemu?

1. Nikt nie skończy gorzej niż zaczął

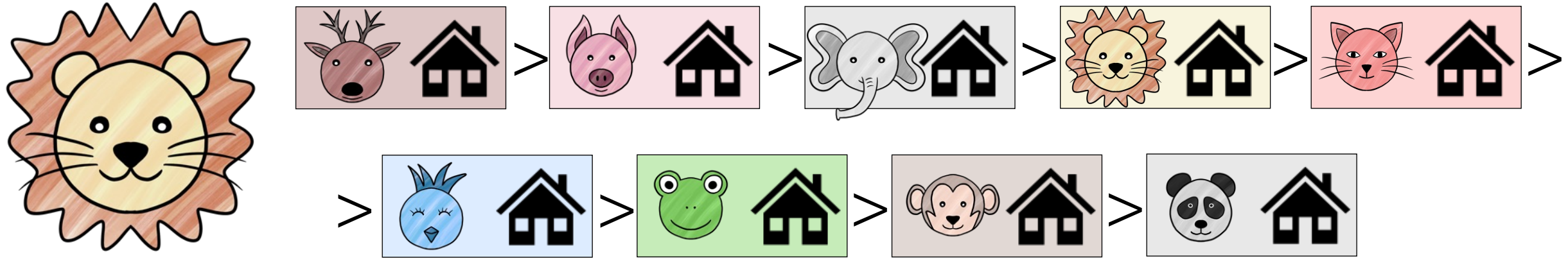
Wymiana domów



Czego chcemy od systemu?

1. Nikt nie skończy gorzej niż zaczął
2. Nikomu nie opłaca się "oszukiwać"

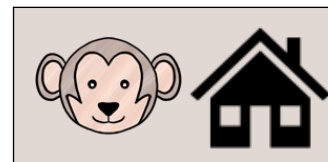
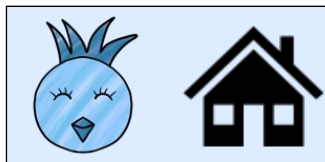
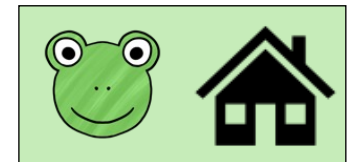
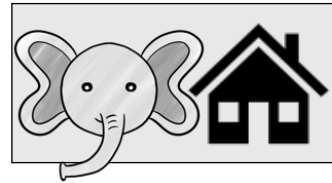
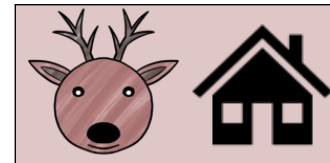
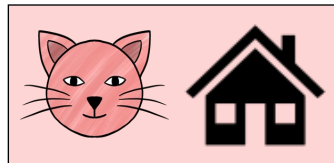
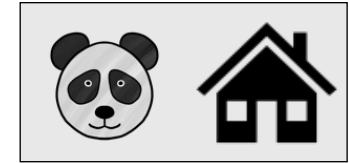
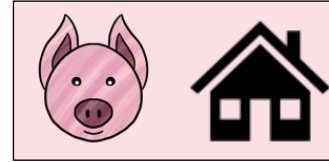
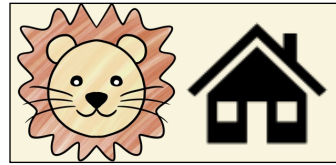
Wymiana domów



Czego chcemy od systemu?

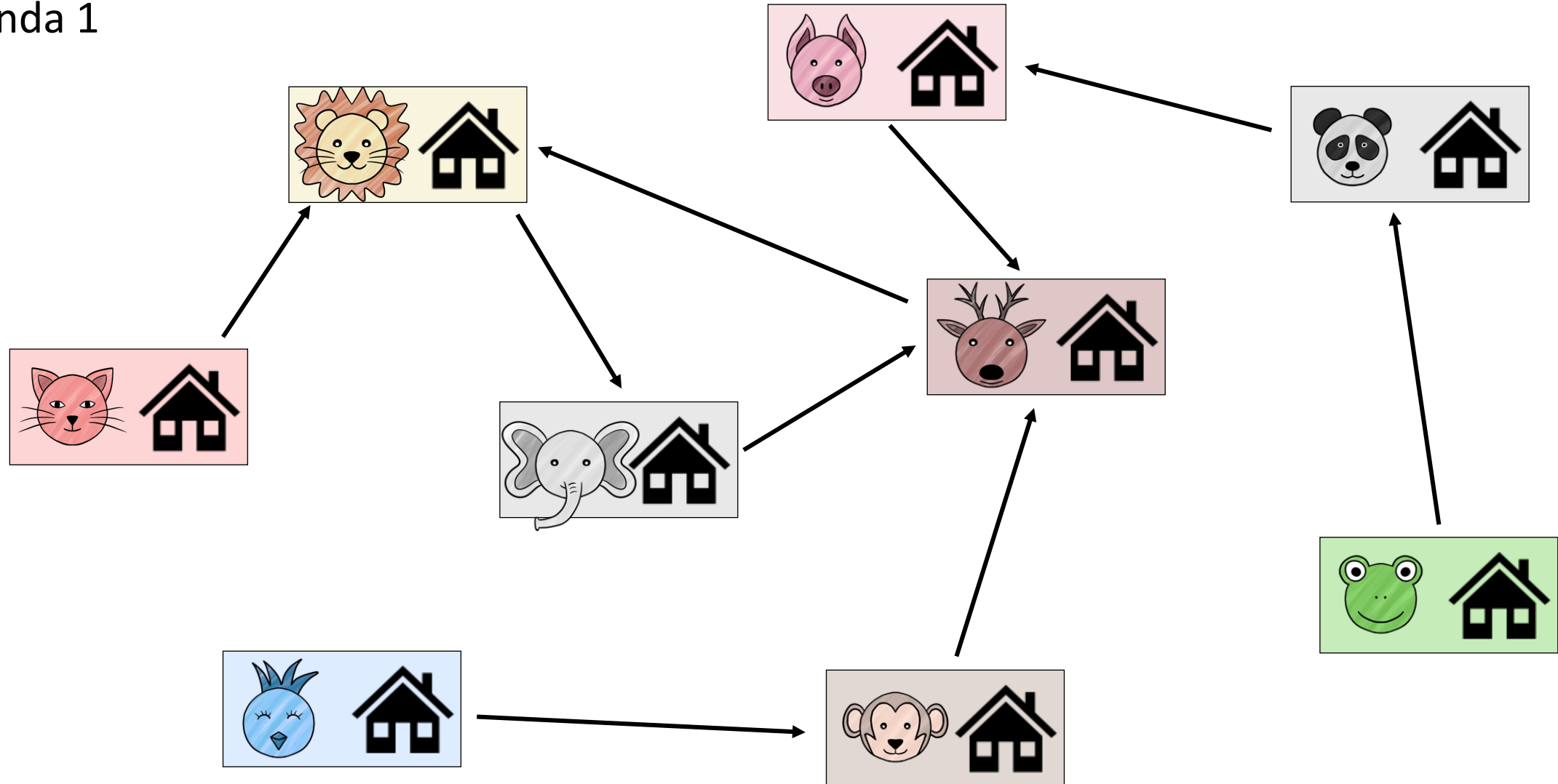
1. Nikt nie skończy gorzej niż zaczął
2. Nikomu nie opłaca się "oszukiwać"
3. Żadnej grupie nie opłaca się wyłamać

Top Trading Cycle [Gale-Scarf-Shapley]



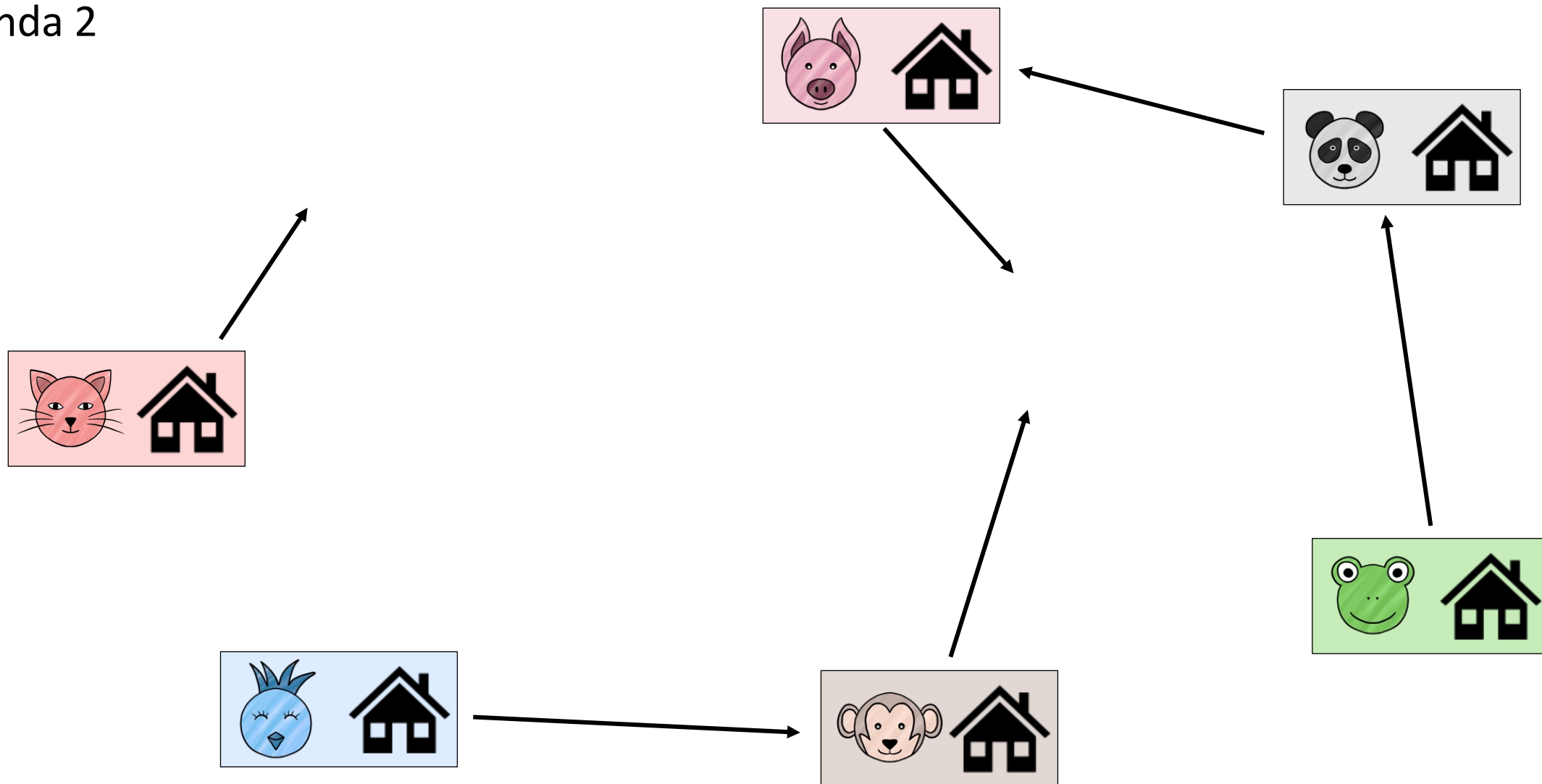
Top Trading Cycle [Gale-Scarf-Shapley]

Runda 1



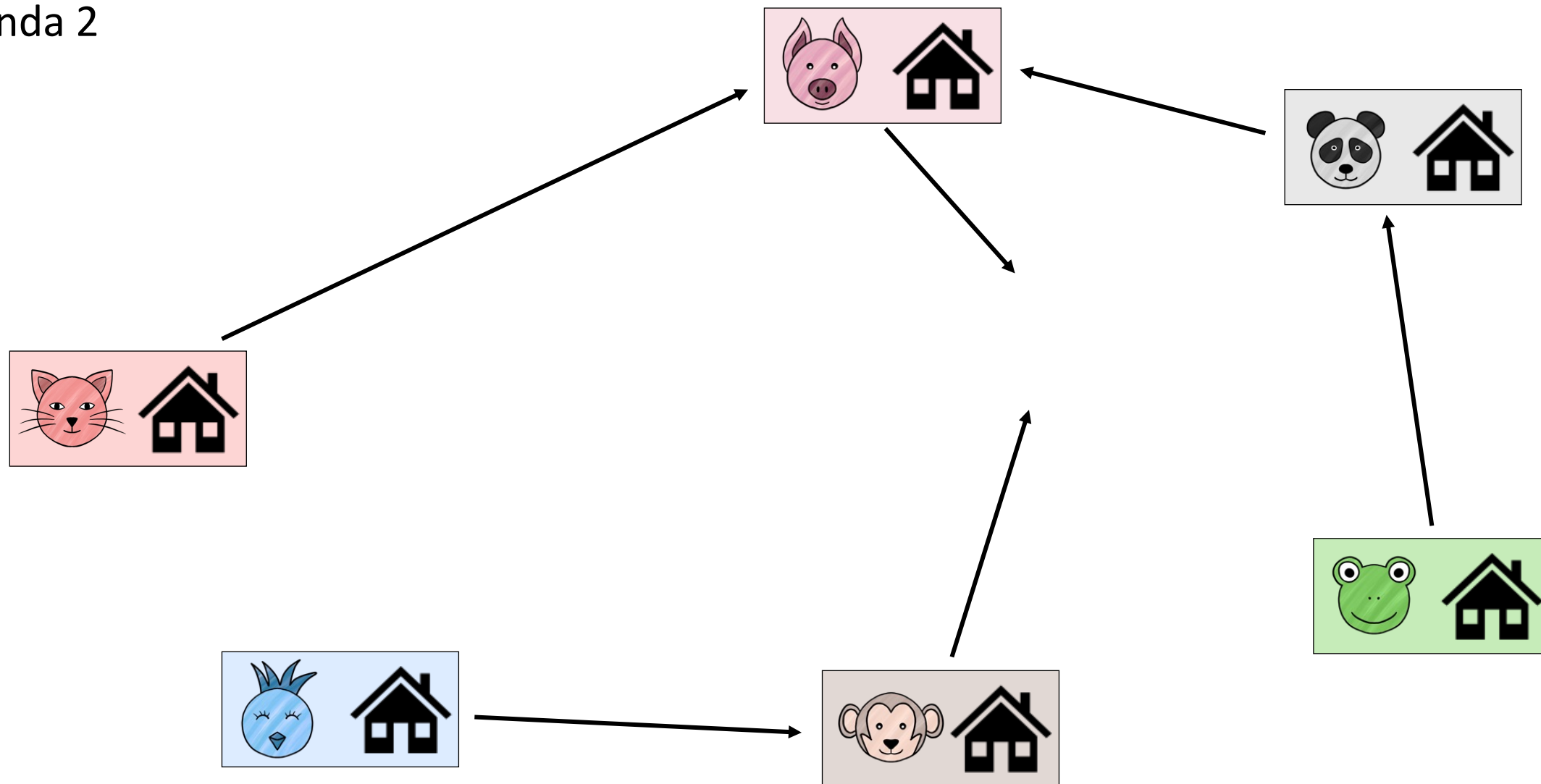
Top Trading Cycle [Gale-Scarf-Shapley]

Runda 2



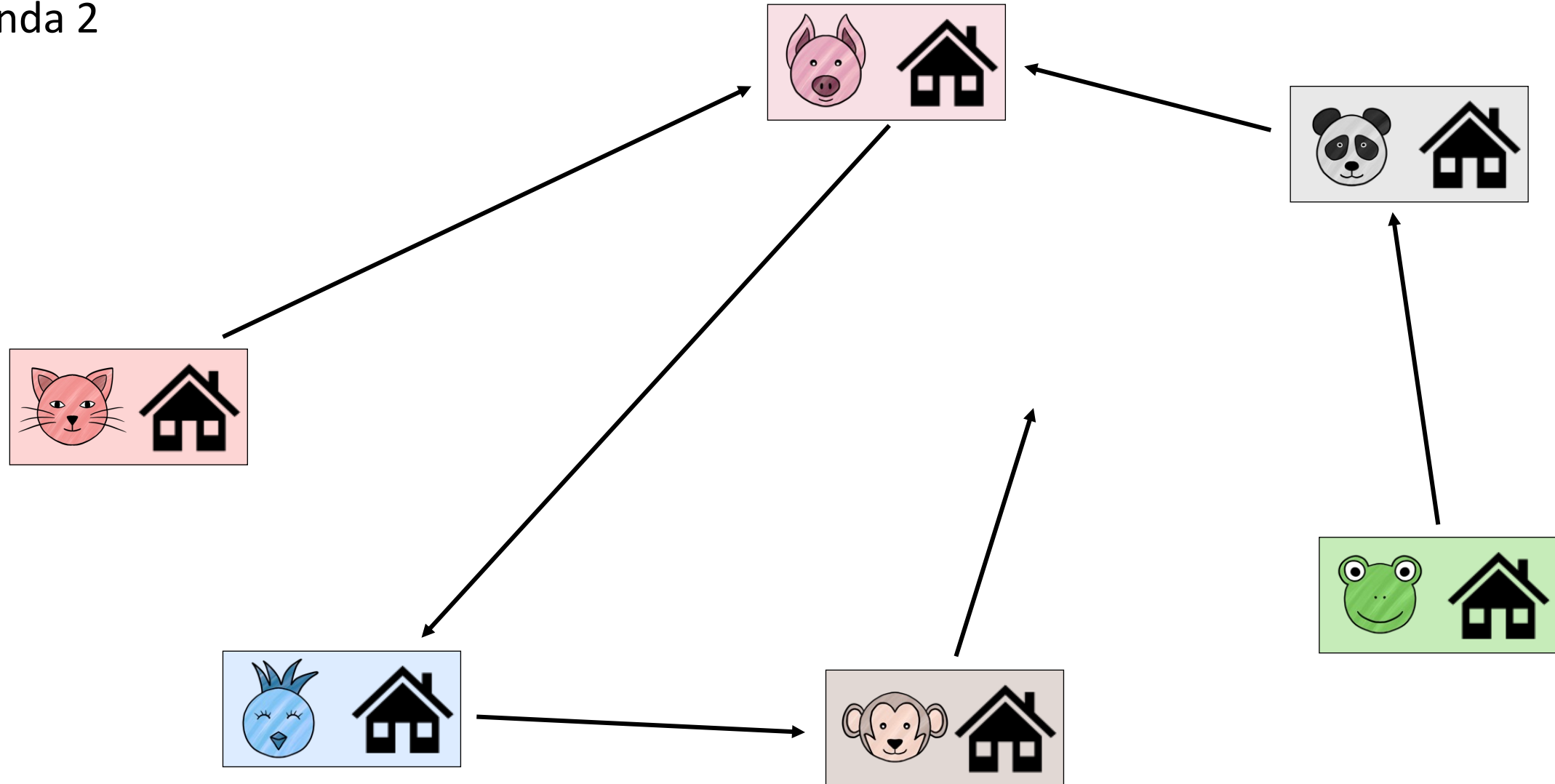
Top Trading Cycle [Gale-Scarf-Shapley]

Runda 2



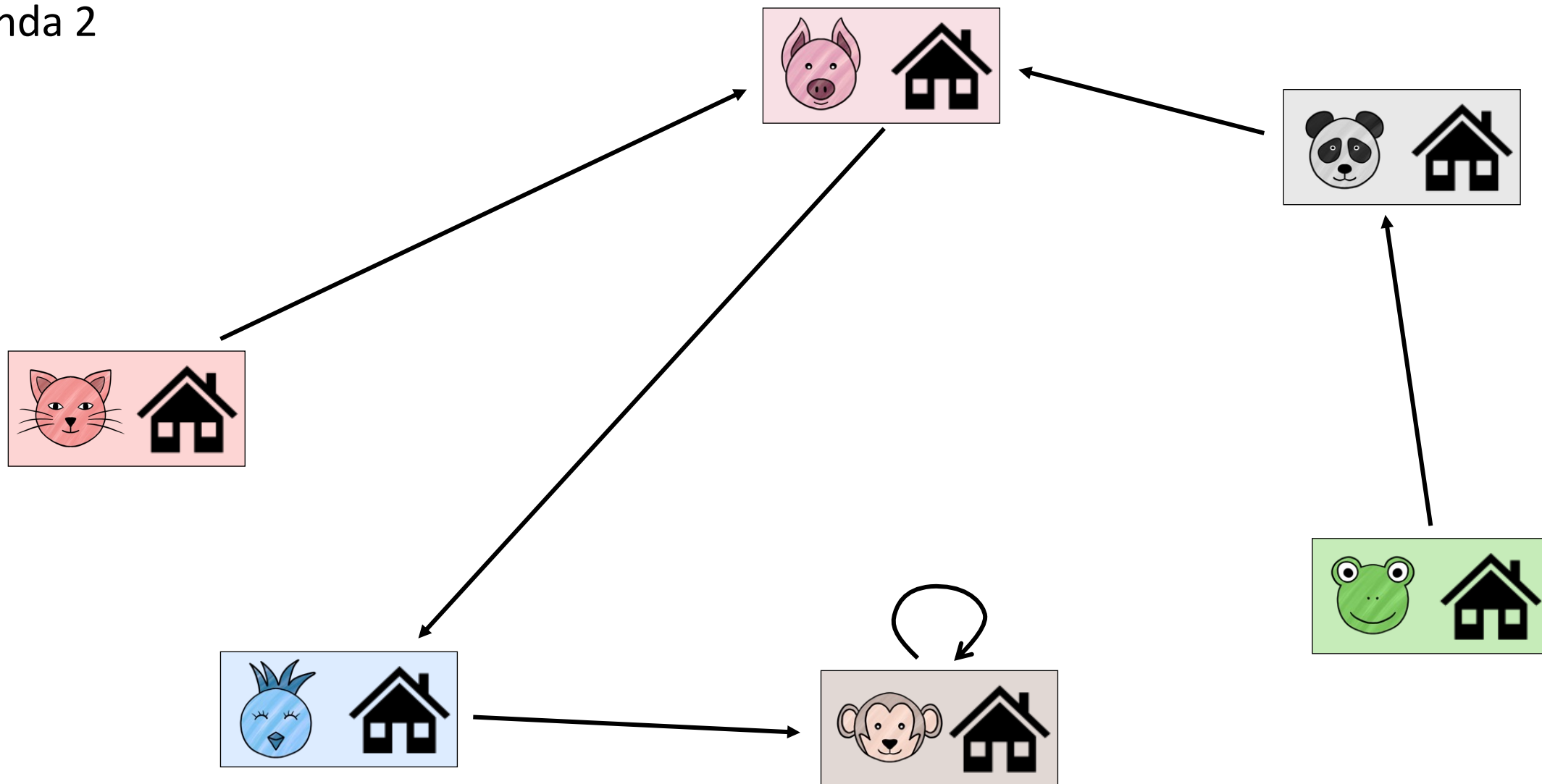
Top Trading Cycle [Gale-Scarf-Shapley]

Runda 2



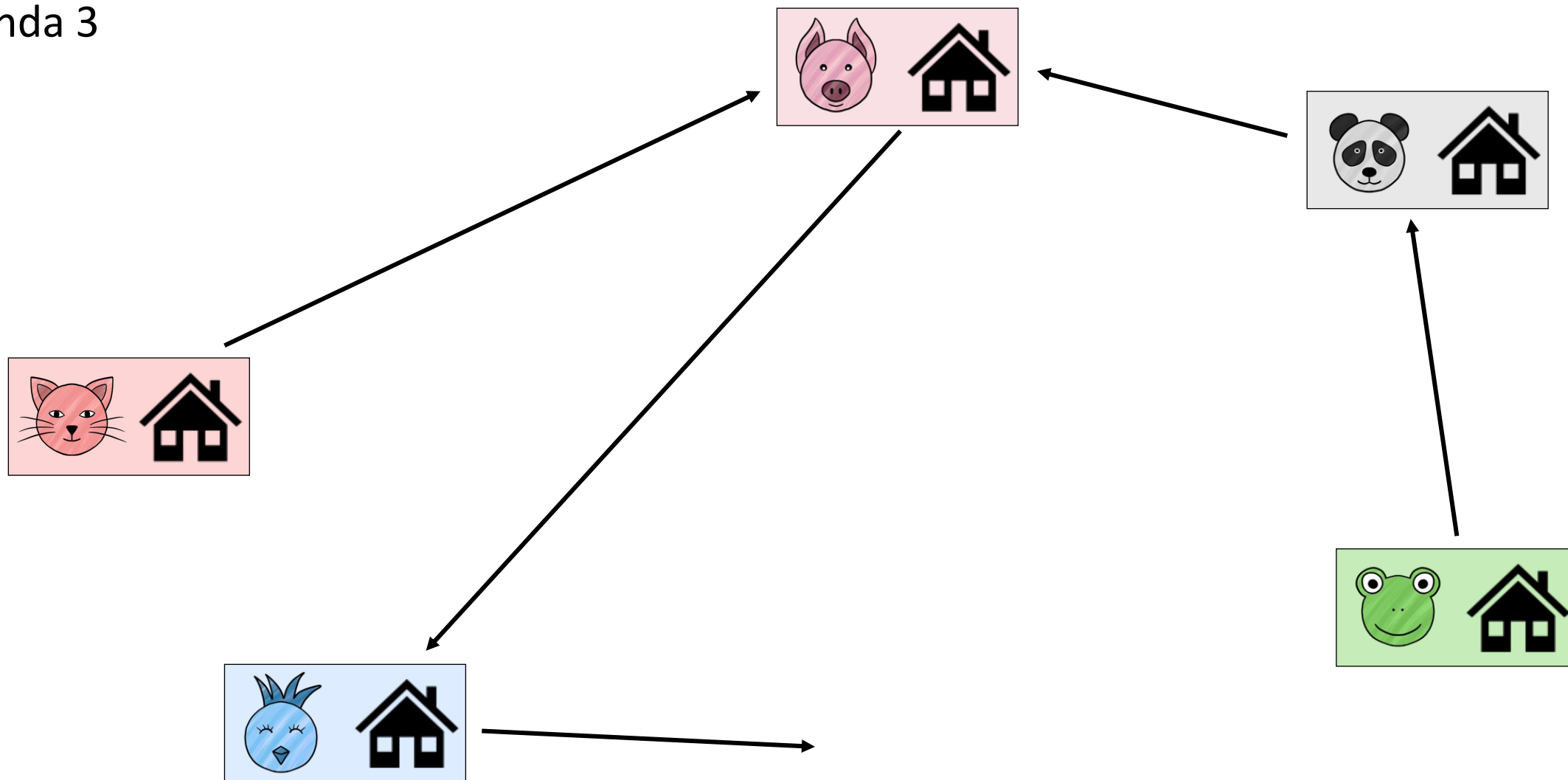
Top Trading Cycle [Gale-Scarf-Shapley]

Runda 2



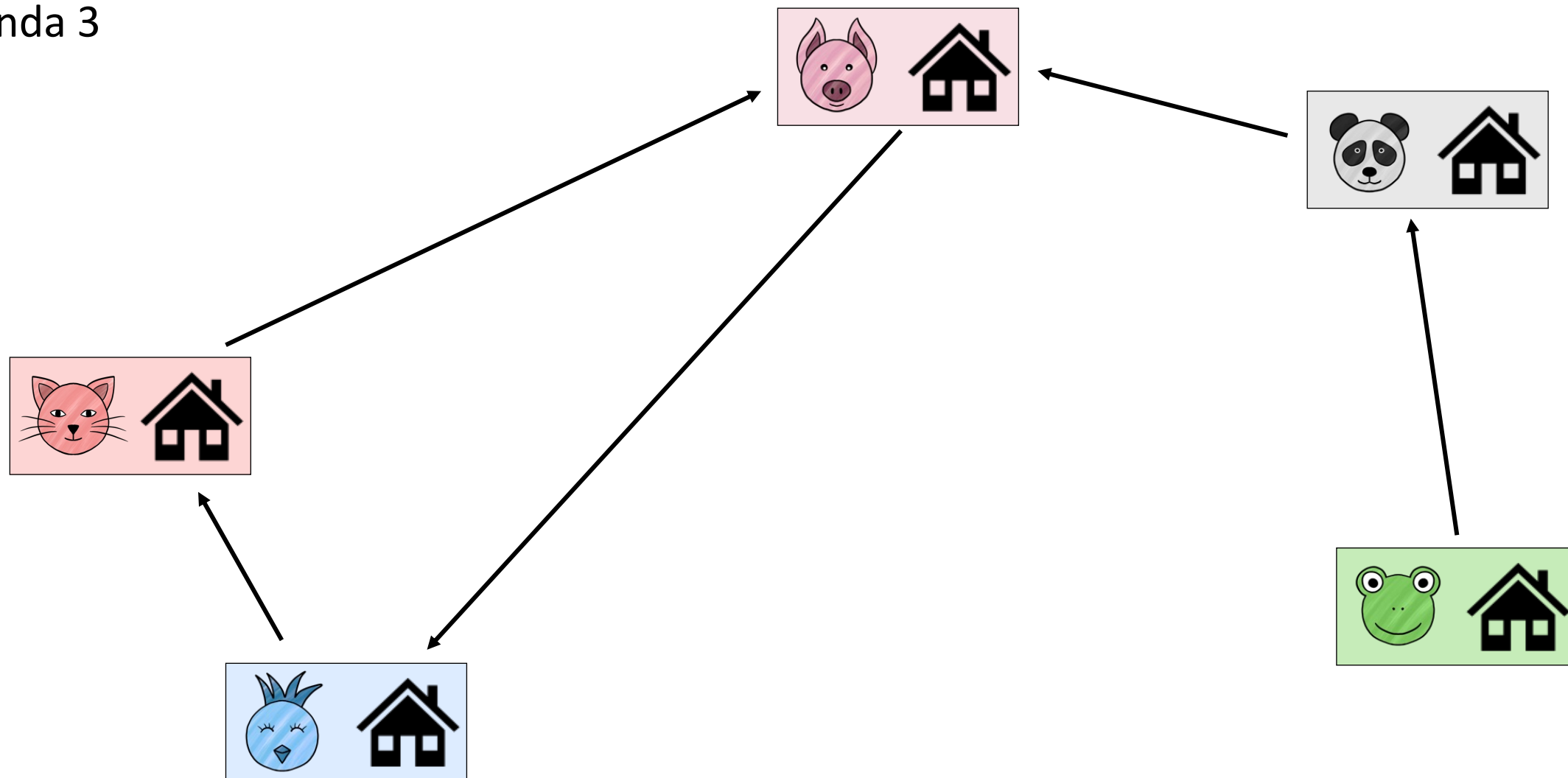
Top Trading Cycle [Gale-Scarf-Shapley]

Runda 3



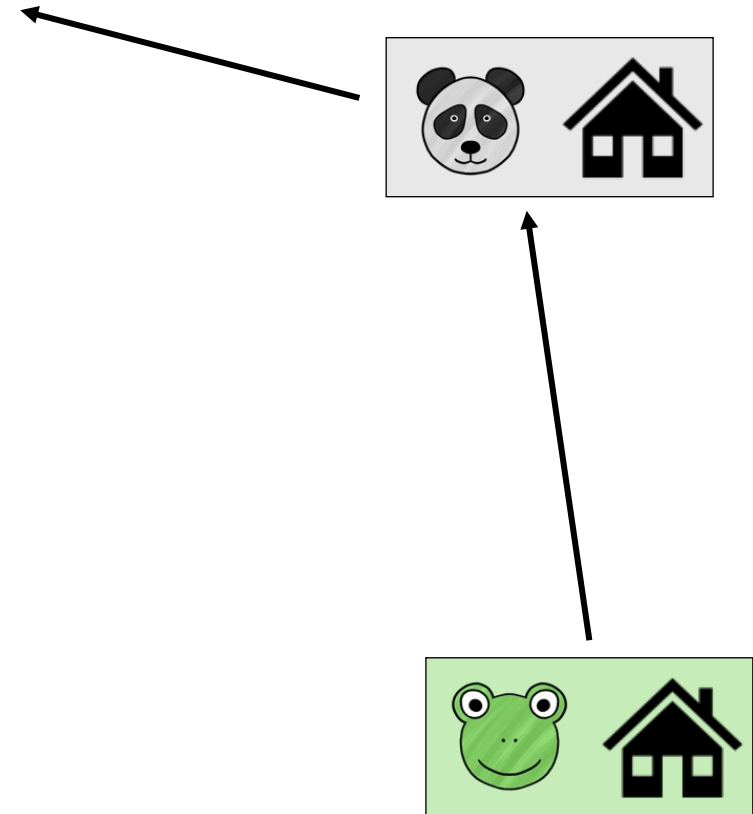
Top Trading Cycle [Gale-Scarf-Shapley]

Runda 3



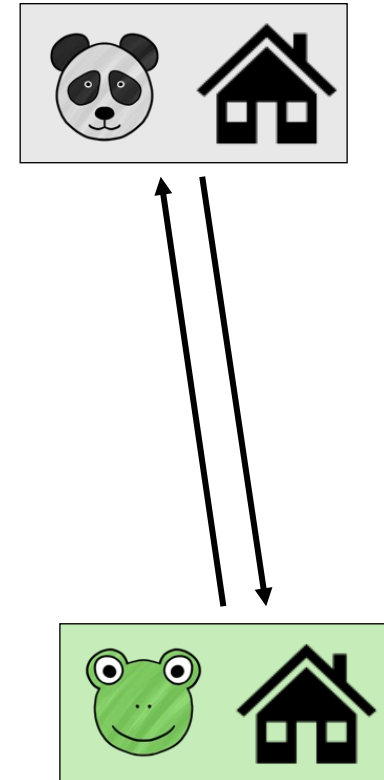
Top Trading Cycle [Gale-Scarf-Shapley]

Runda 4

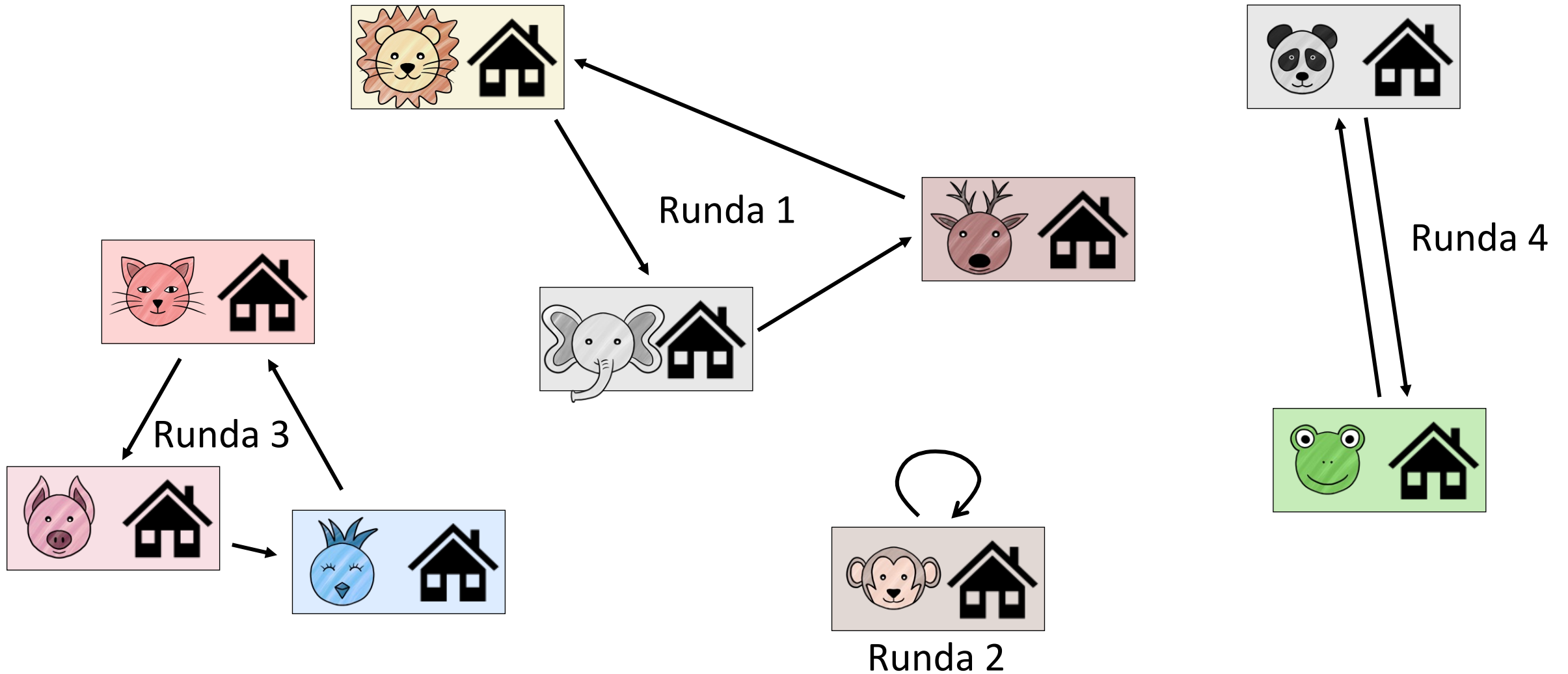


Top Trading Cycle [Gale-Scarf-Shapley]

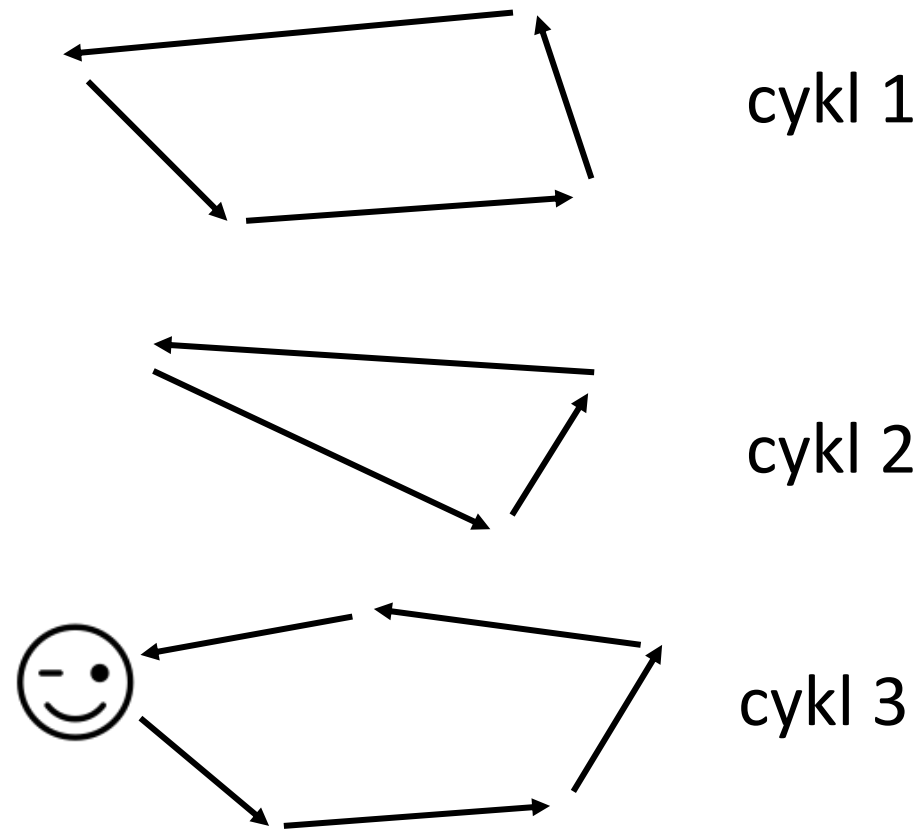
Runda 4



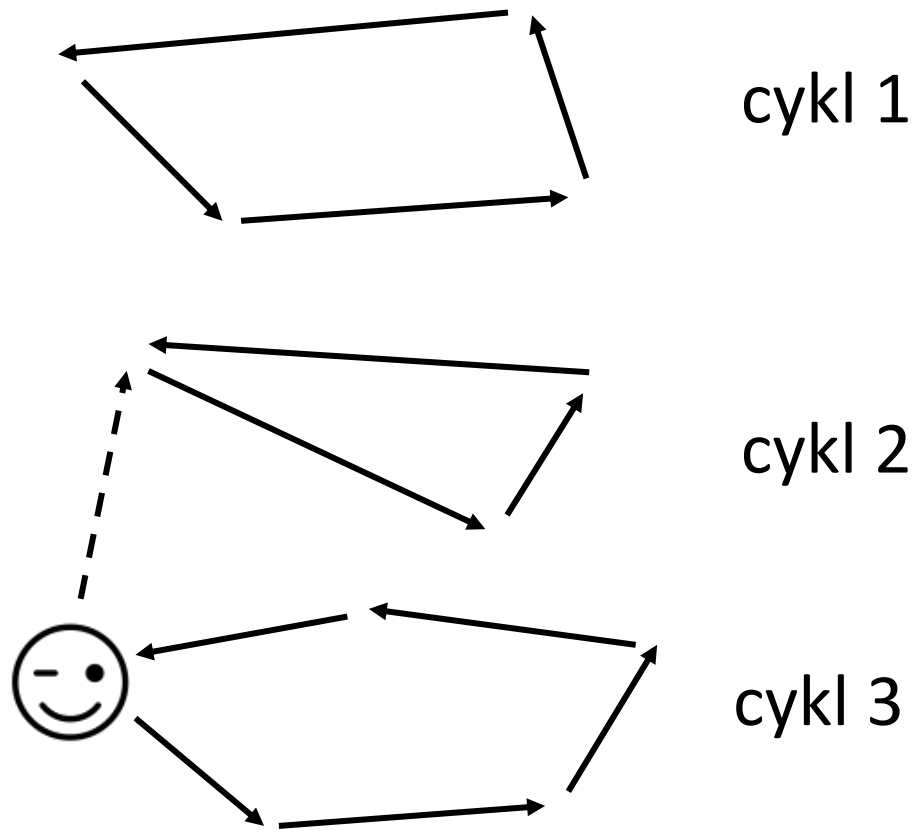
Top Trading Cycle [Gale-Scarf-Shapley]



Top Trading Cycle [Gale-Scarff-Shapley]

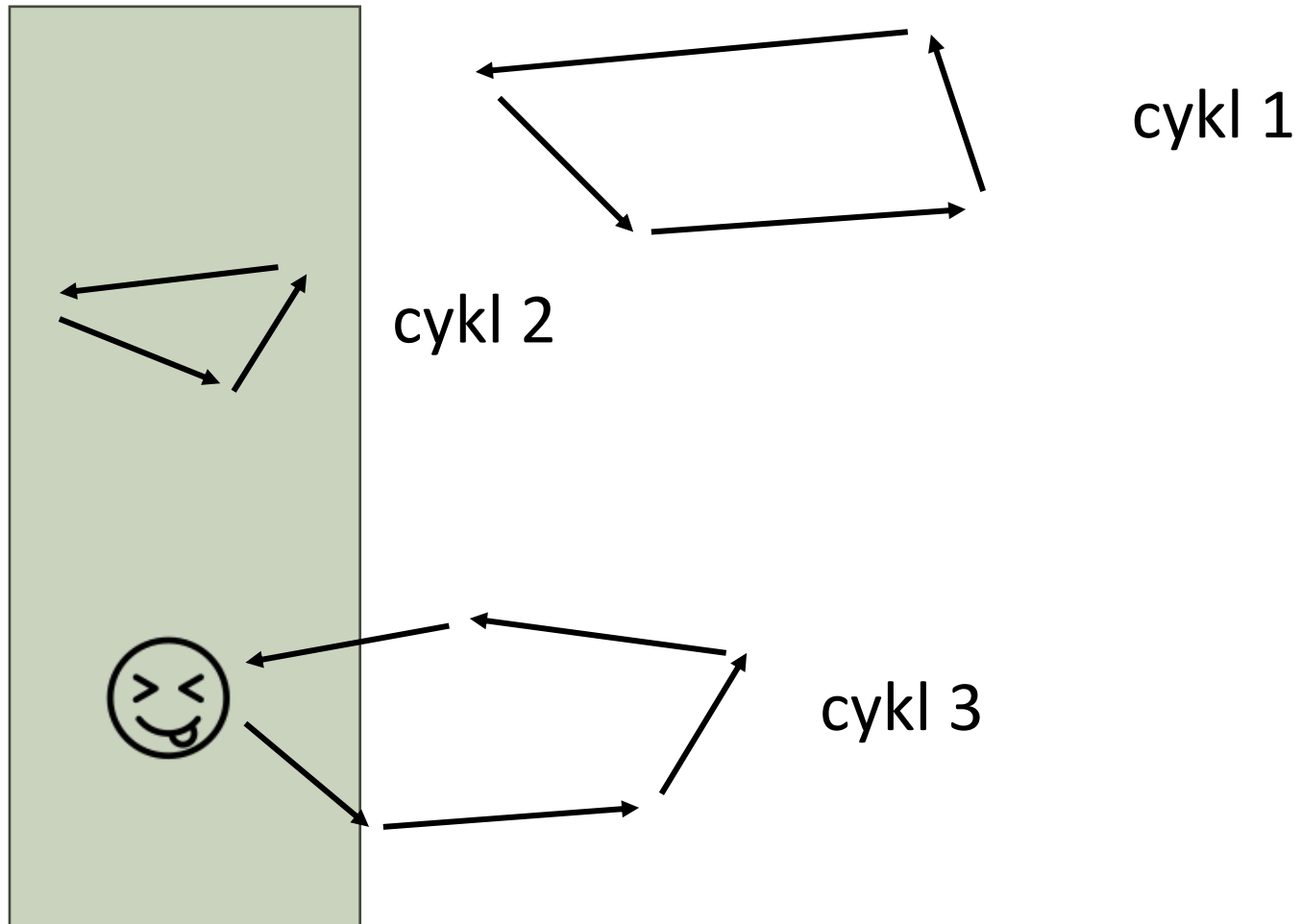


Top Trading Cycle [Gale-Scarff-Shapley]



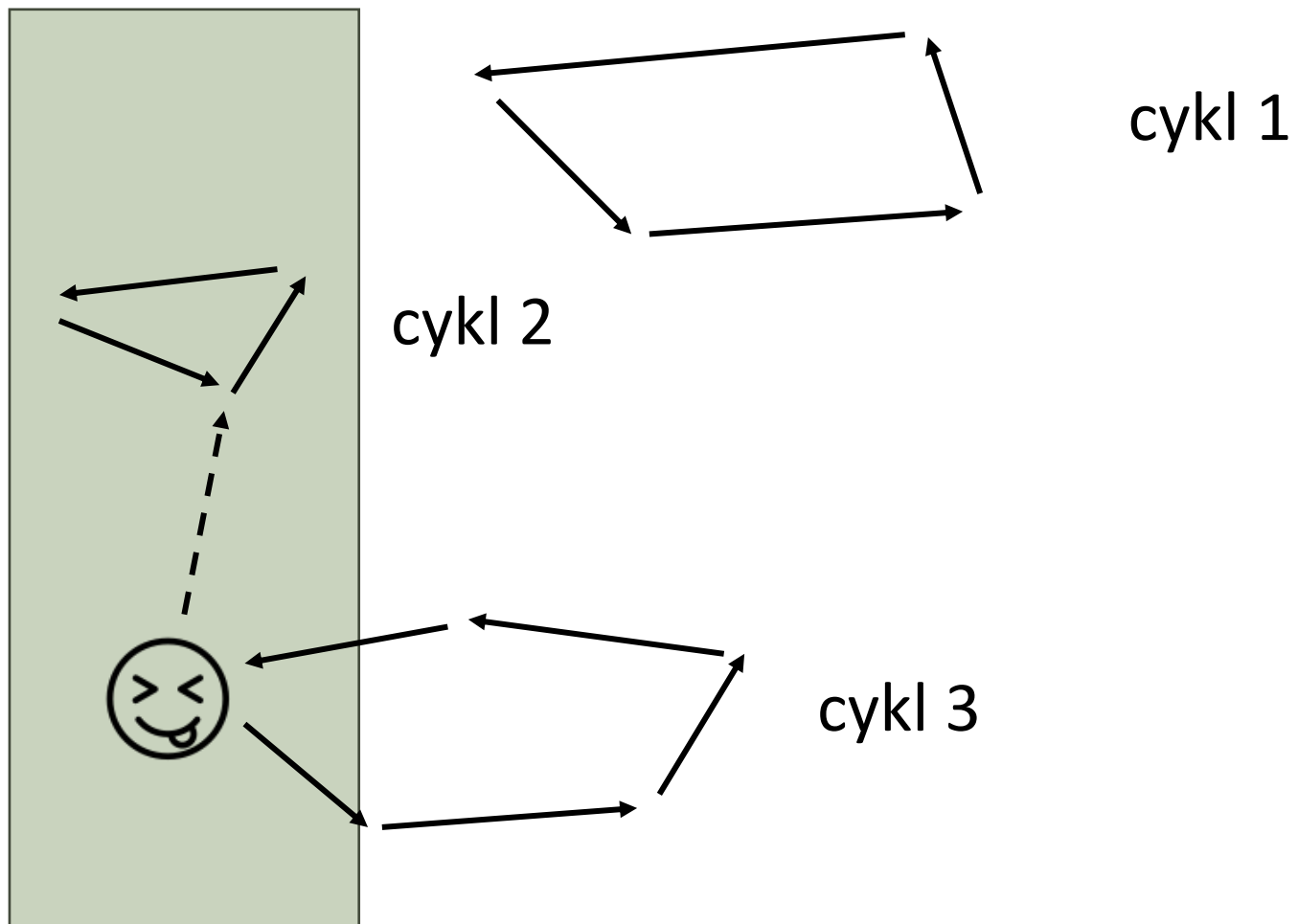
Top Trading Cycle [Gale-Scarf-Shapley]

grupa wyłamująca się

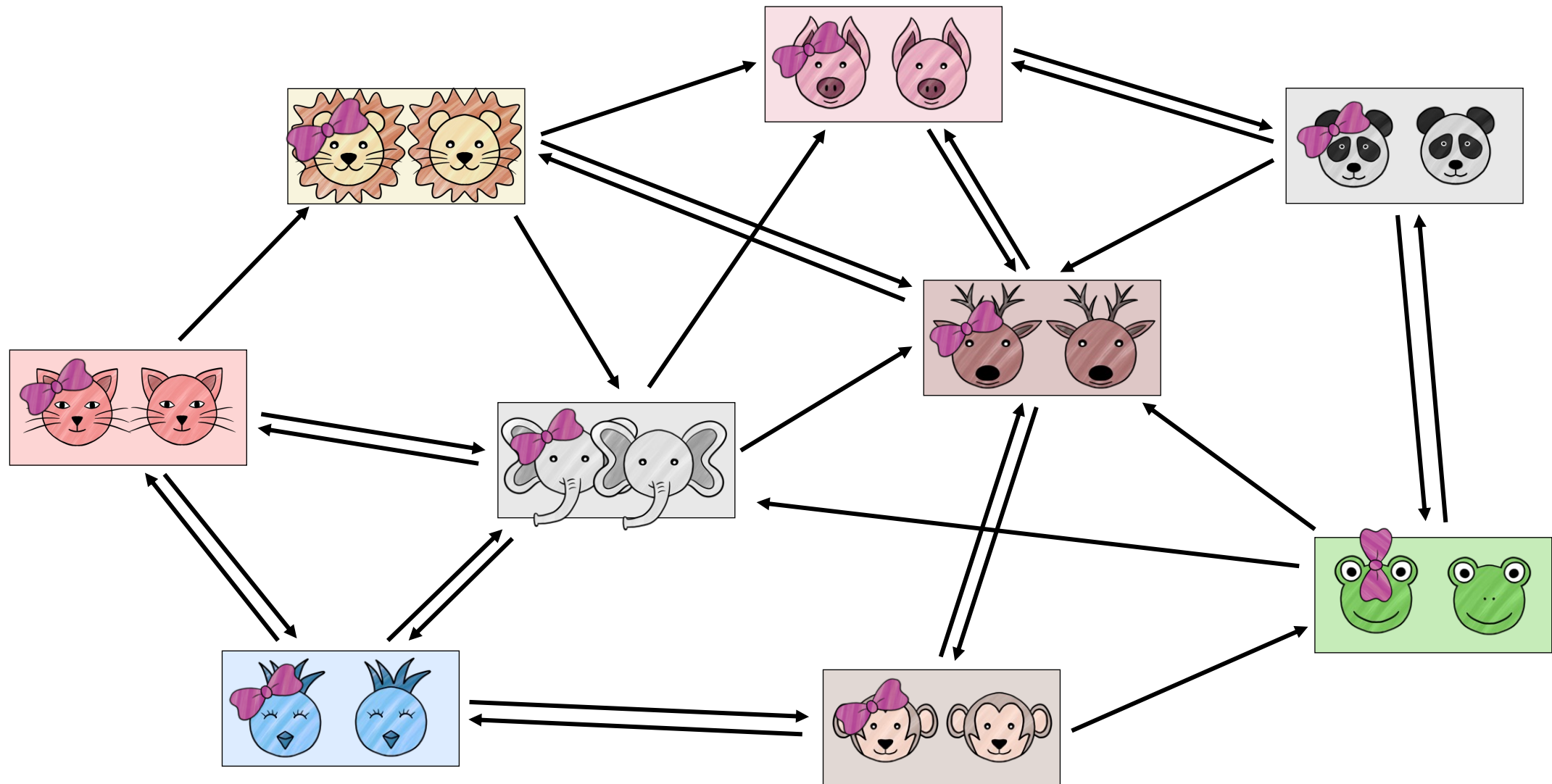


Top Trading Cycle [Gale-Scarf-Shapley]

grupa wyłamująca się

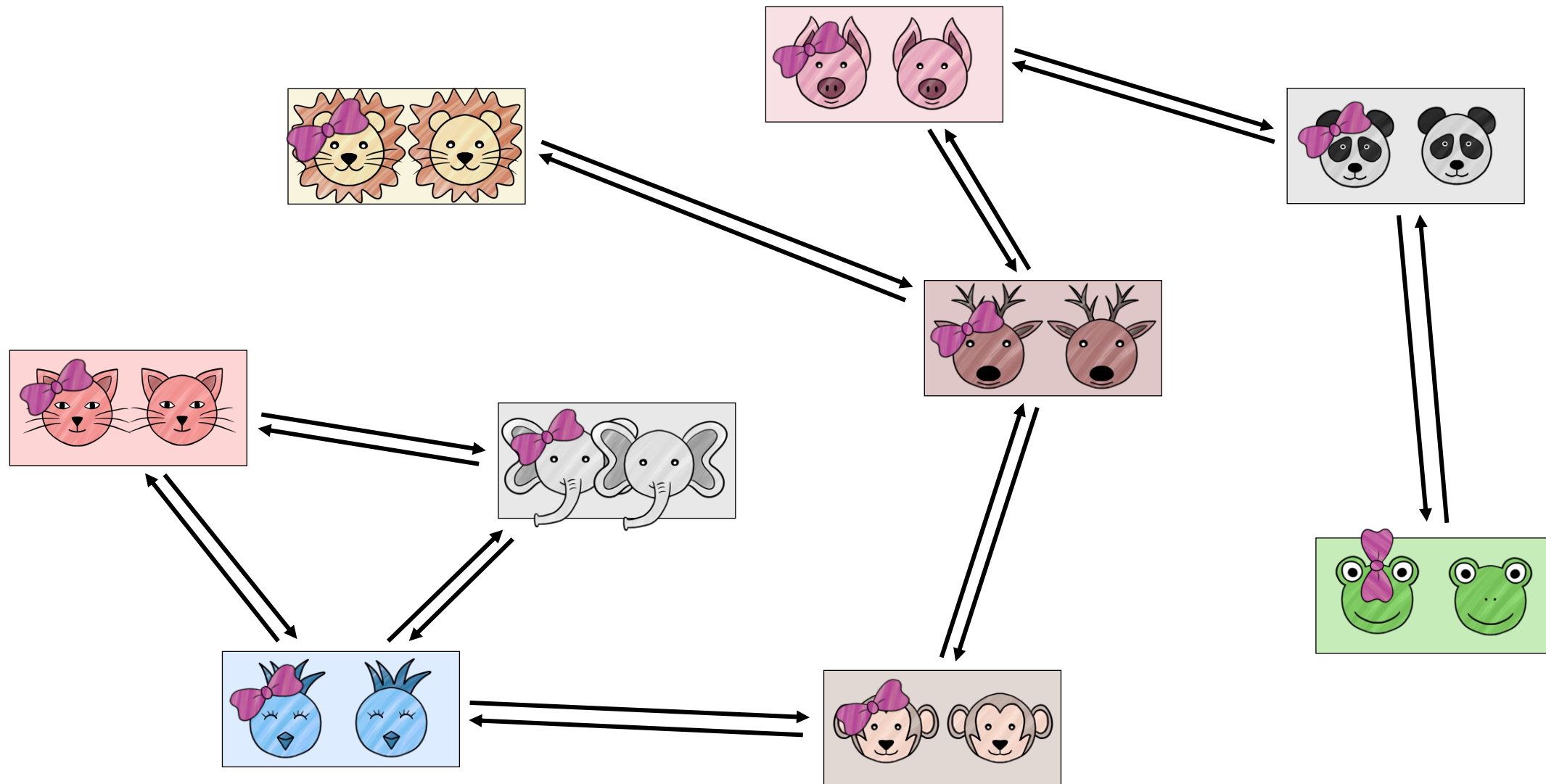


Wymiana nerek

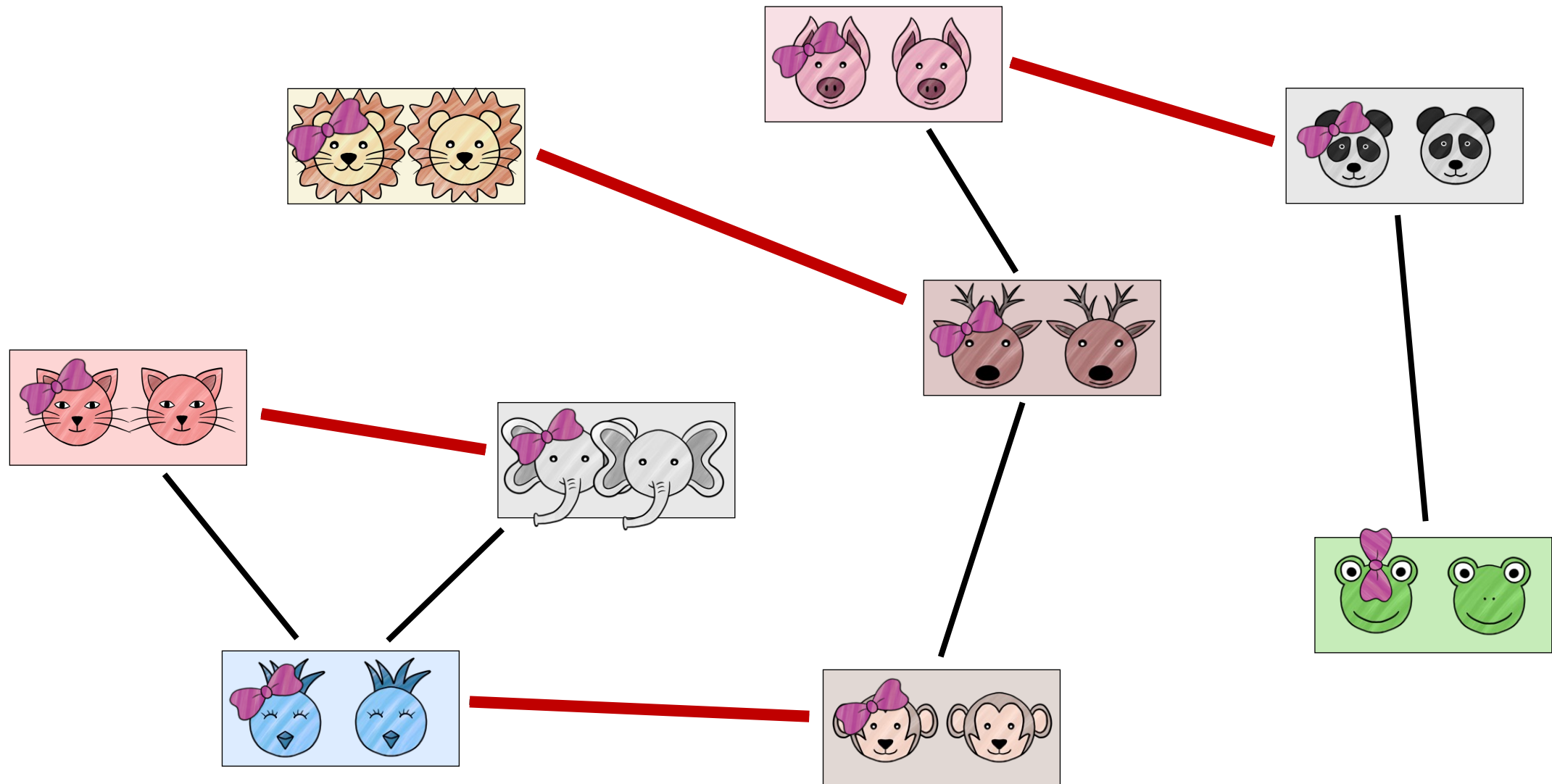




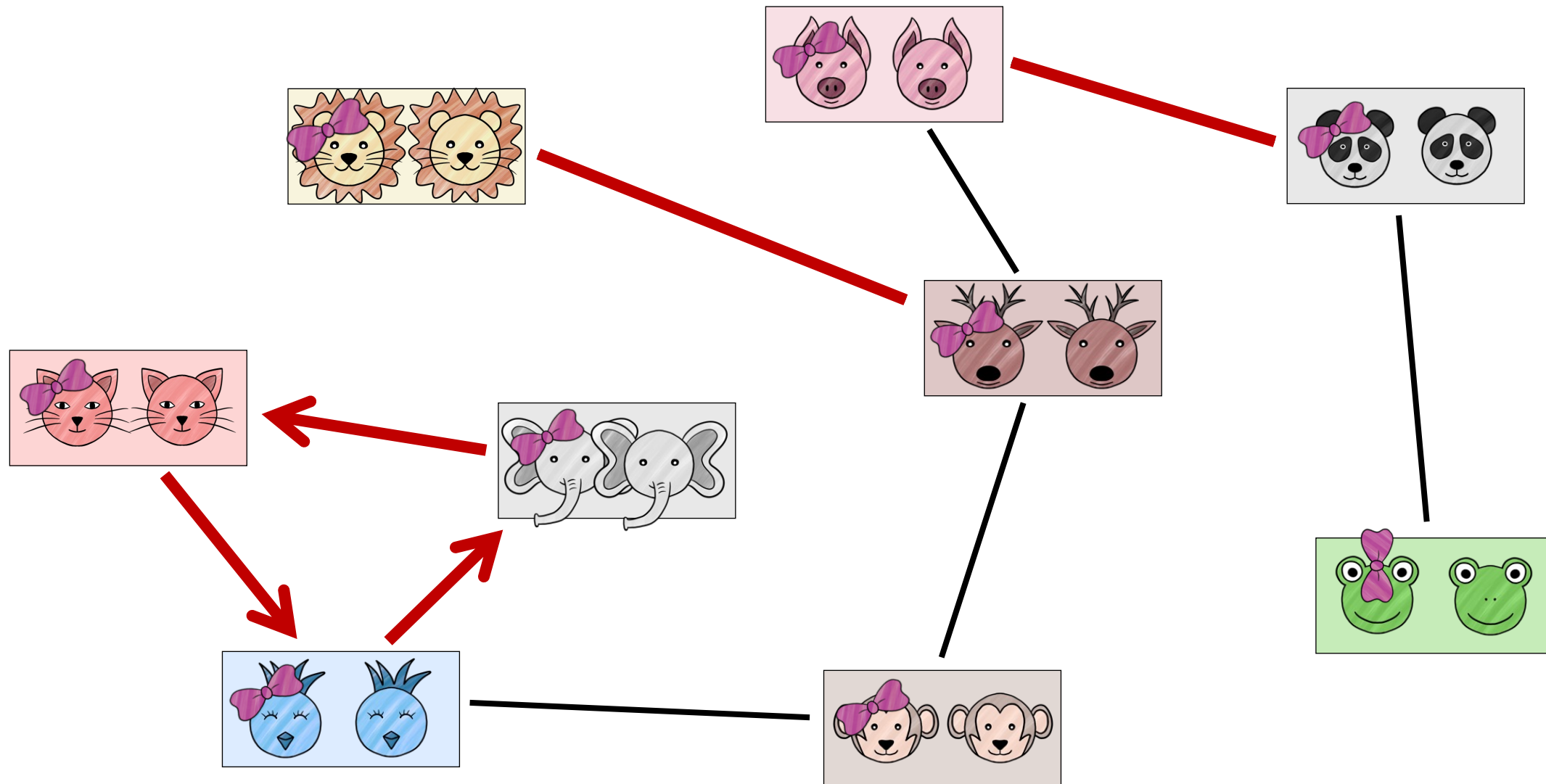
Wymiana nerek



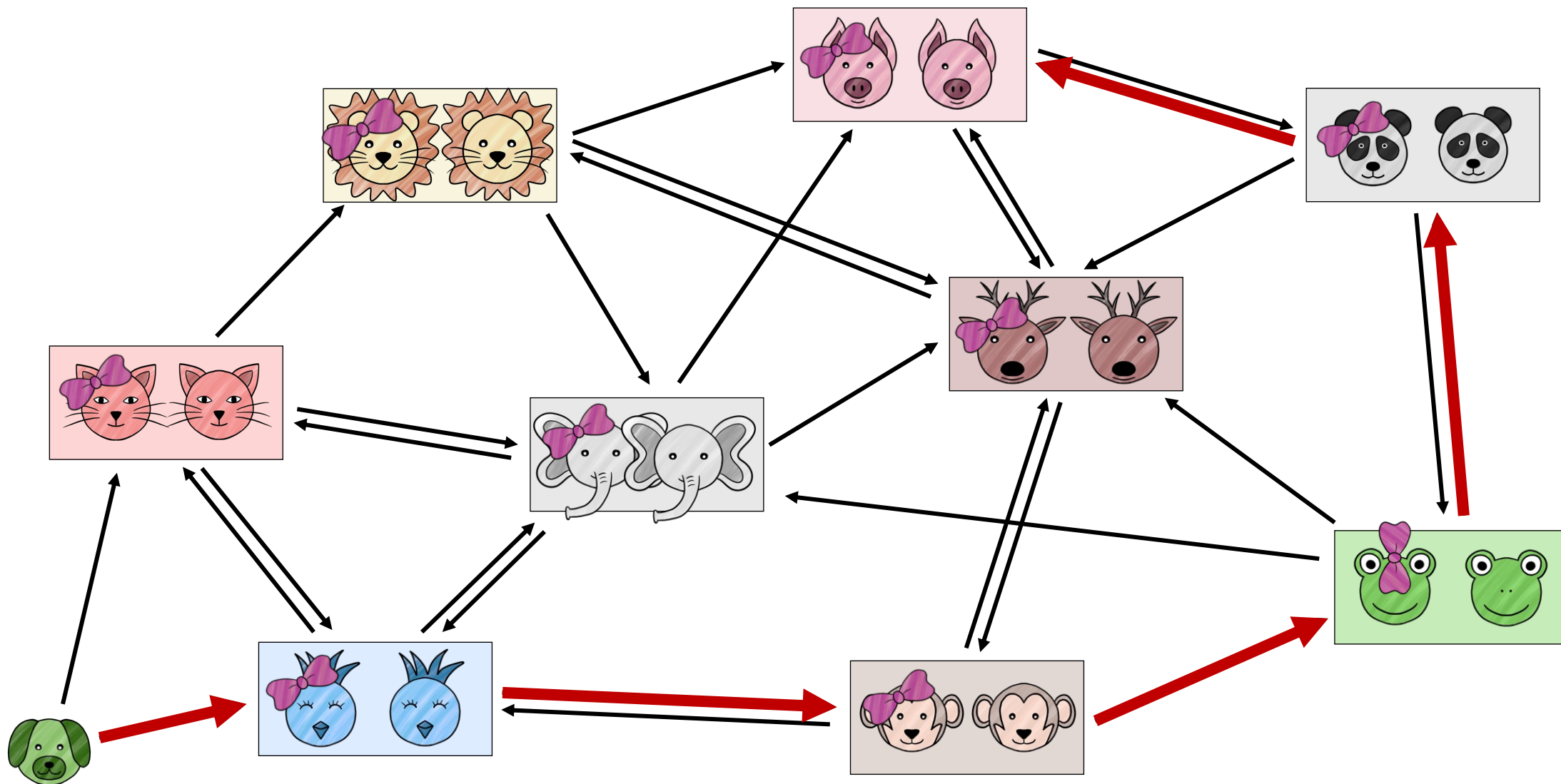
Wymiana nerek



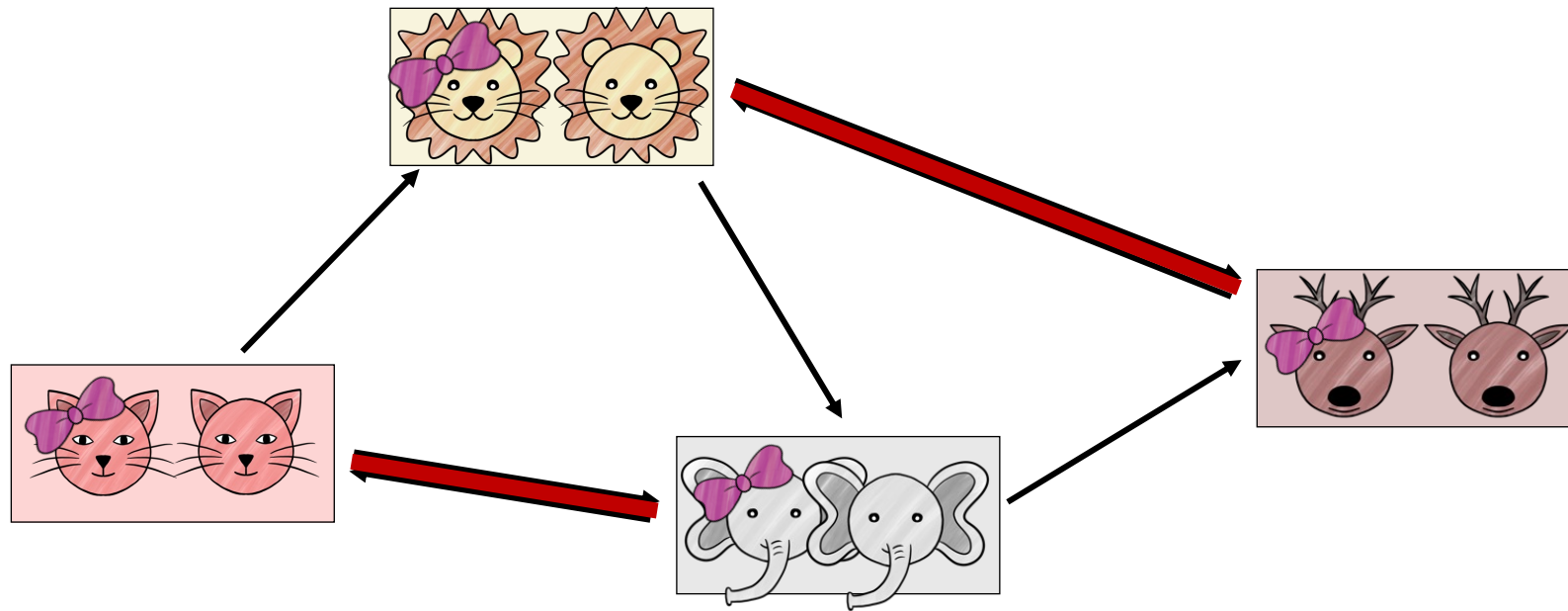
Wymiana nerek



Wymiana nerek



Wymiana nerek



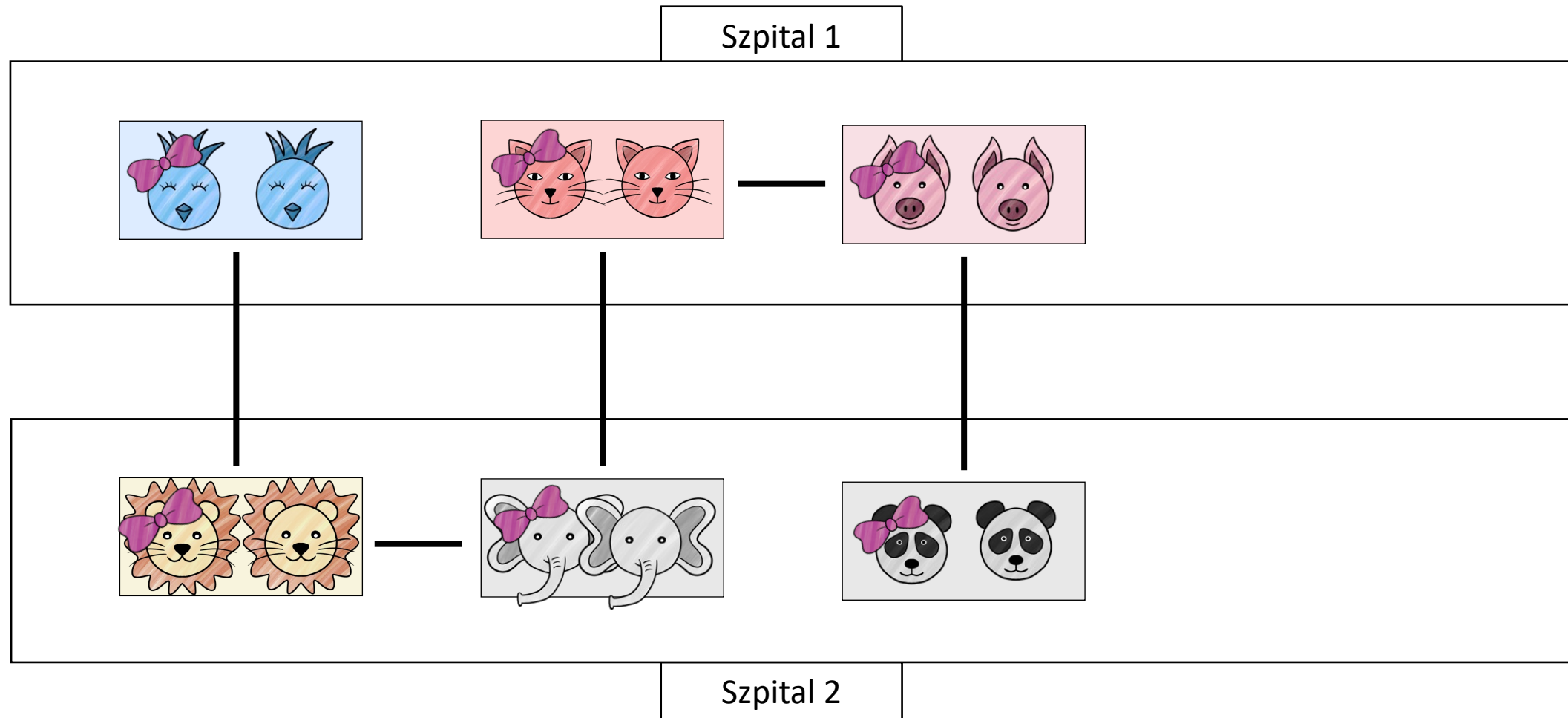
Wymiana nerek

Wymiana nerek

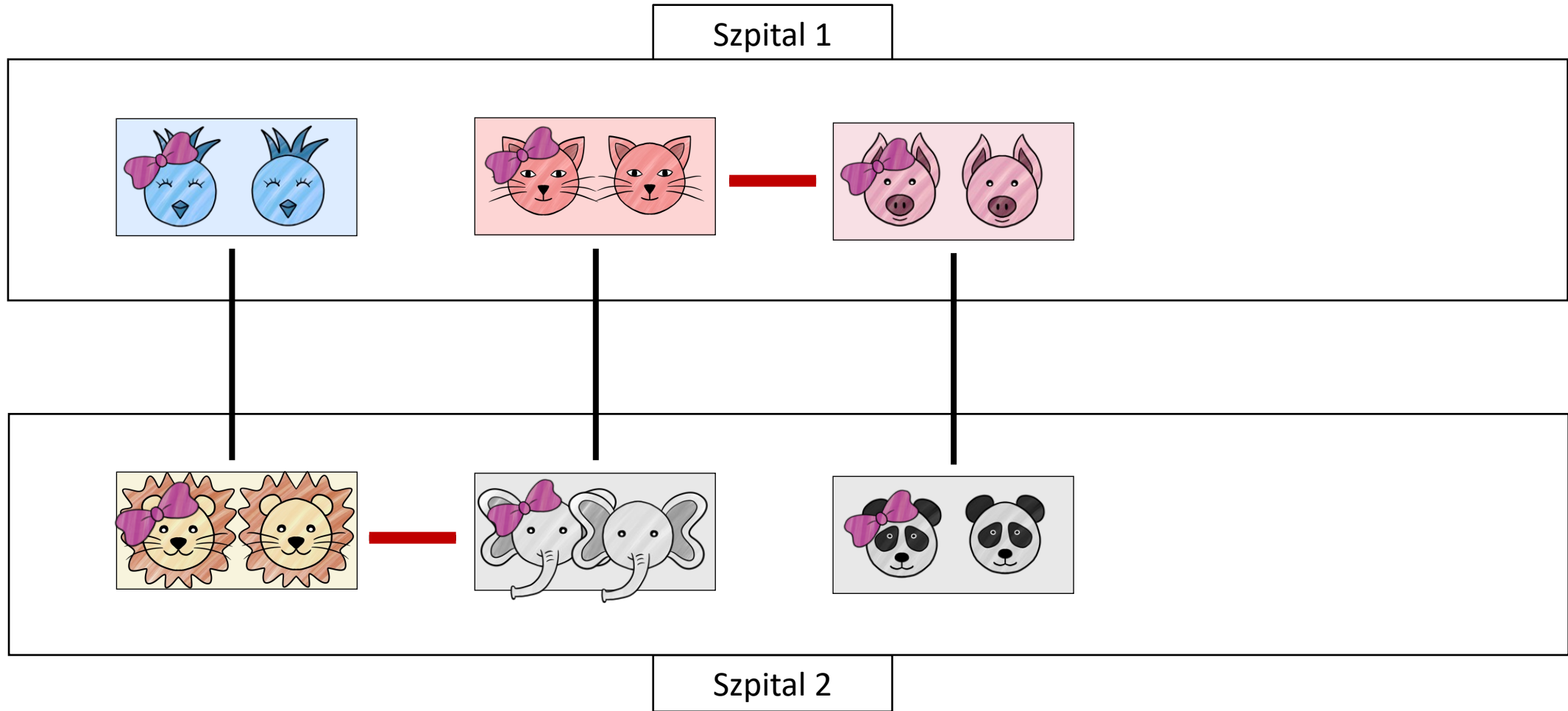


źródło: New York Times (<https://www.nytimes.com/2012/02/19/health/lives-forever-linked-through-kidney-transplant-chain-124.html>)

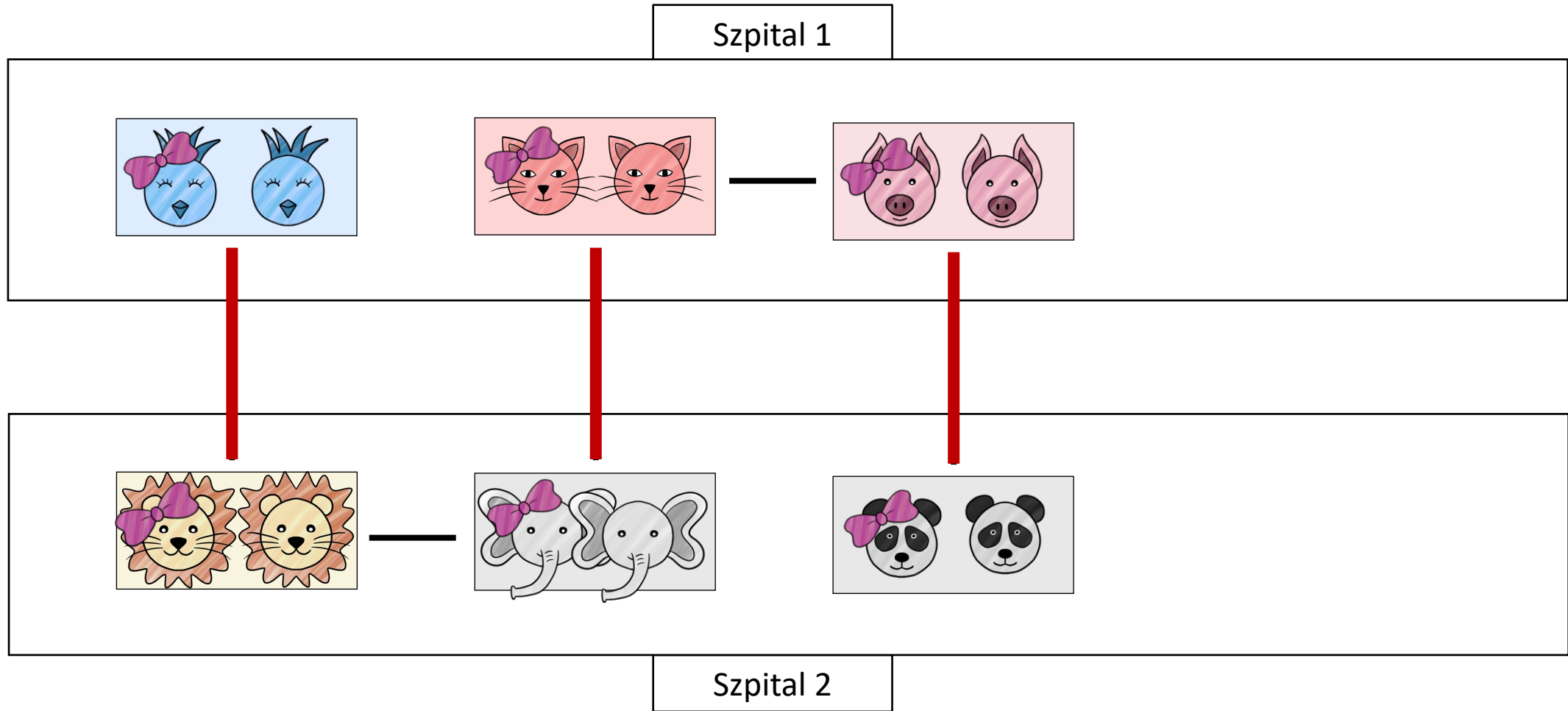
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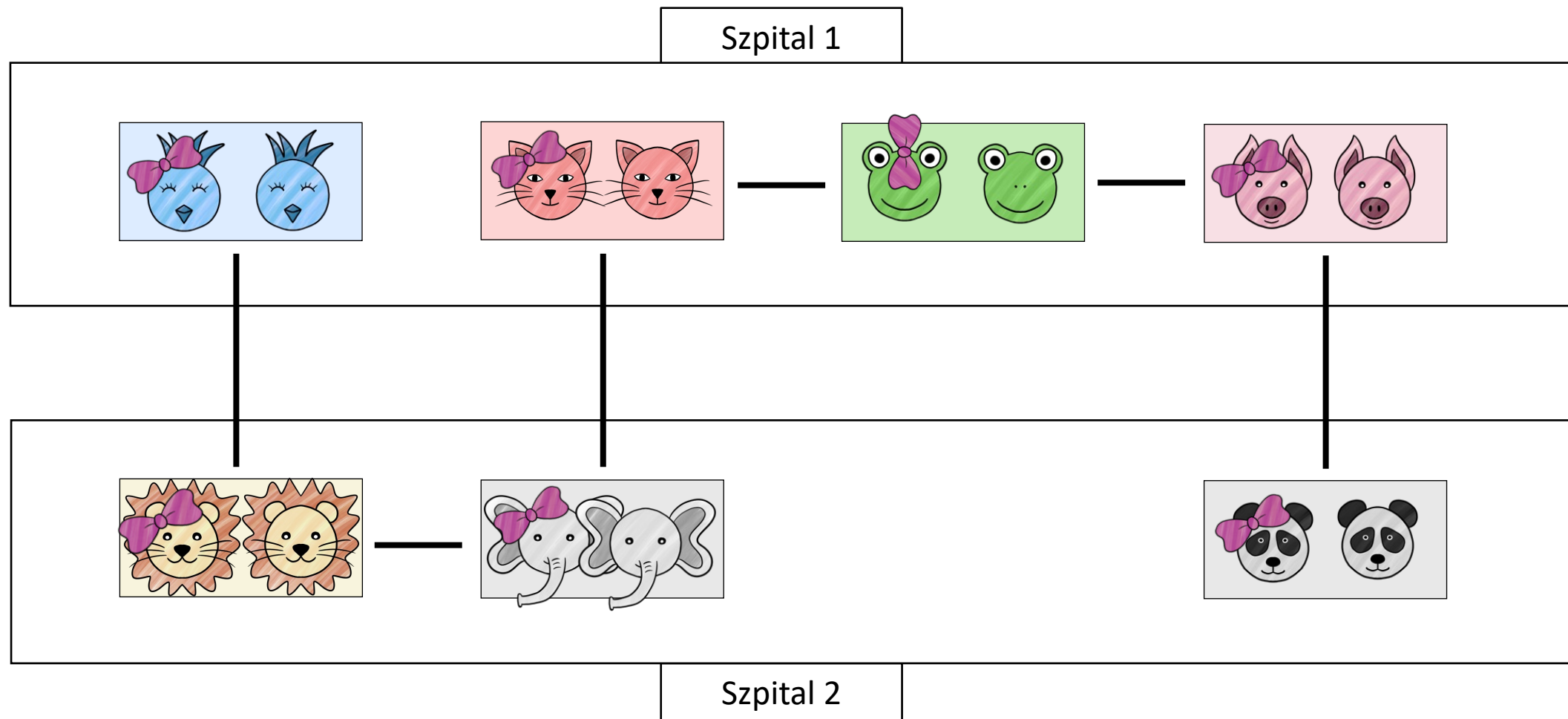
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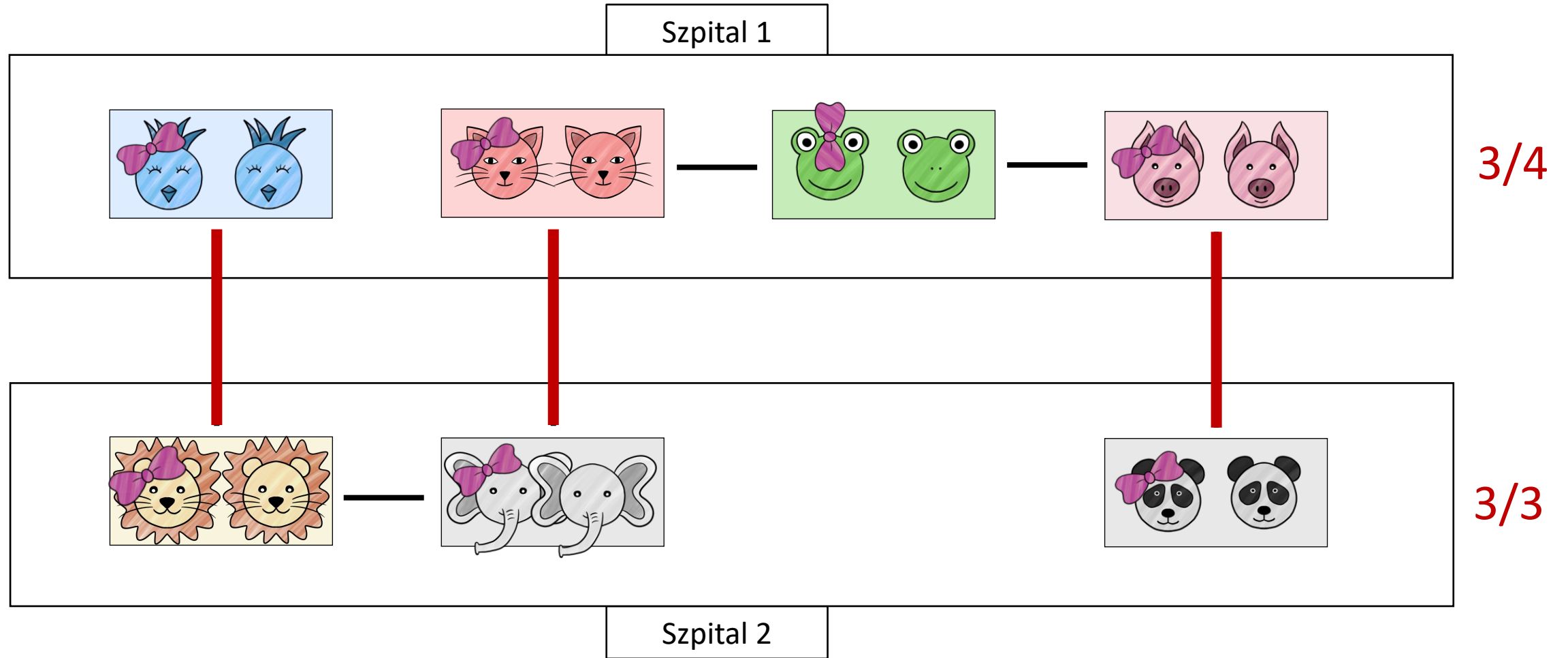
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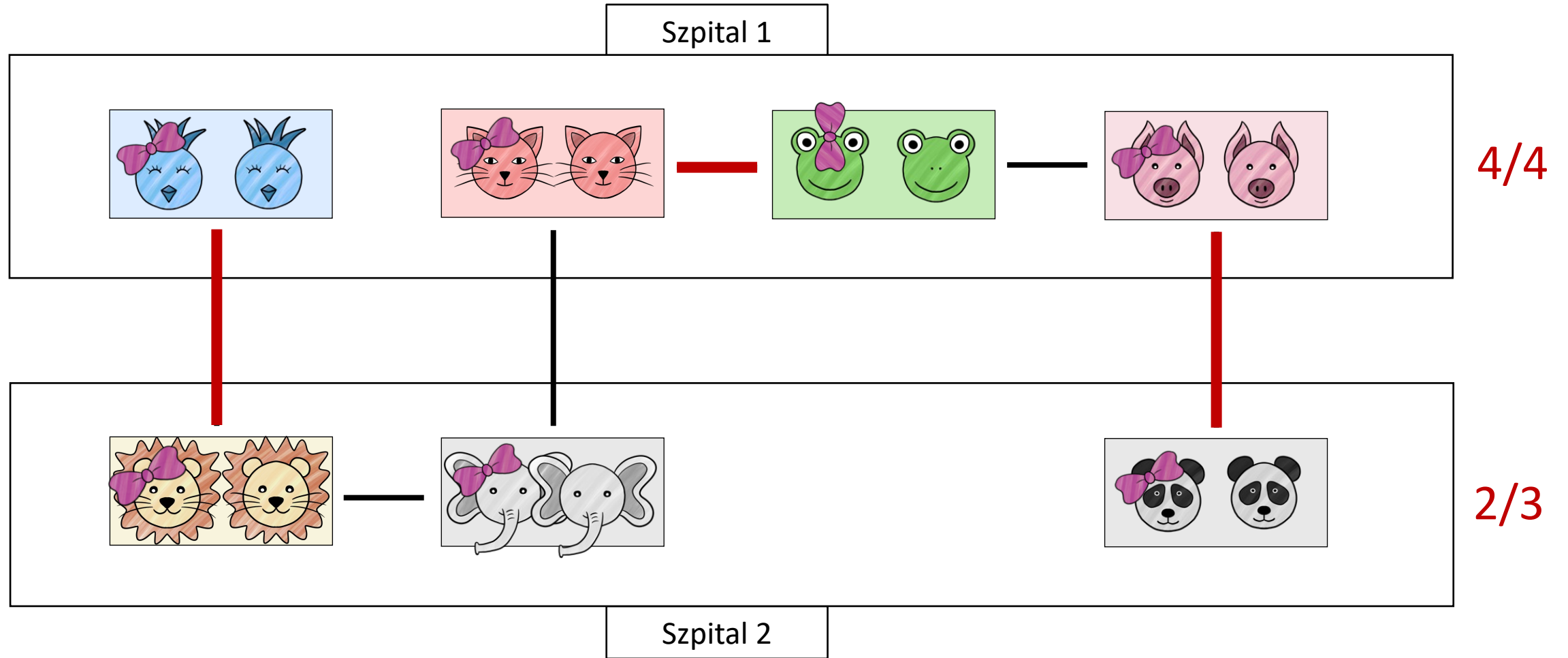
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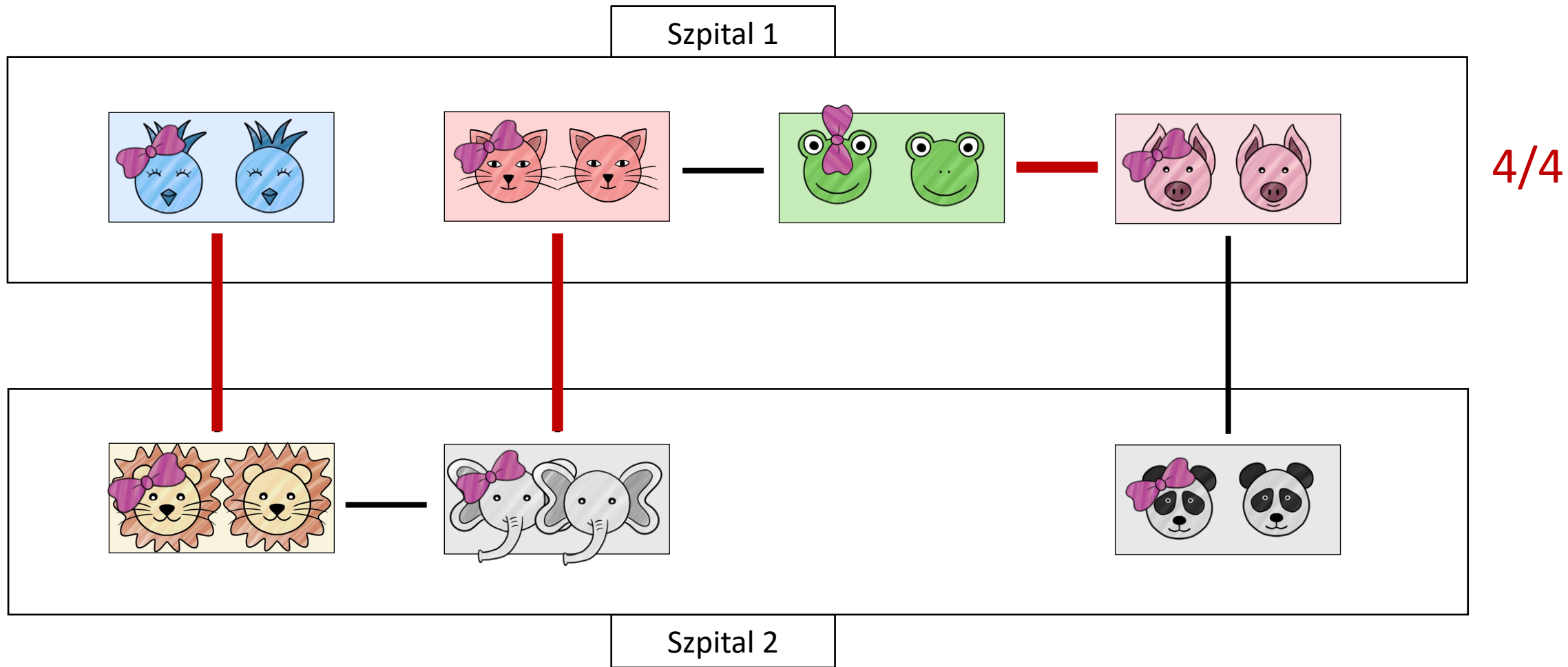
Wymiana nerek



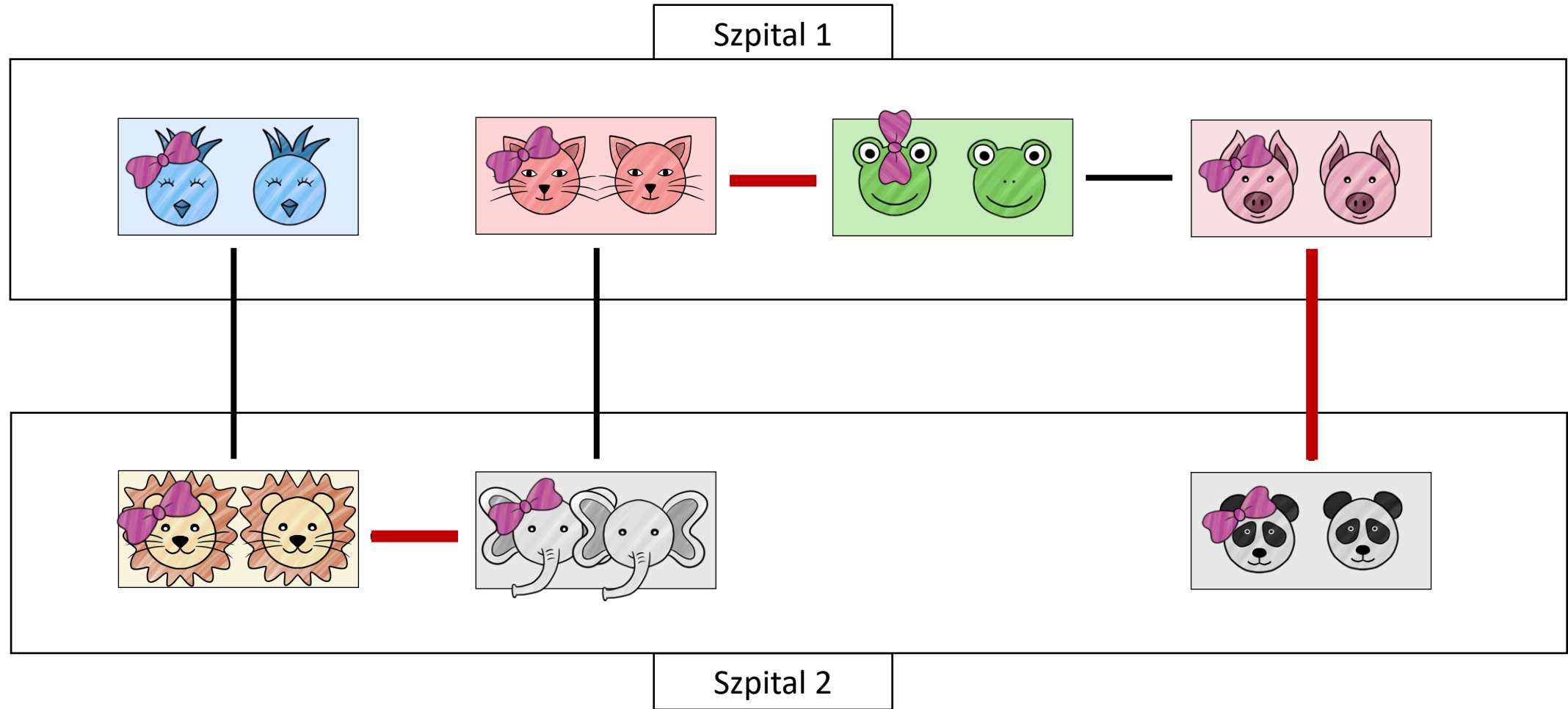
Wymiana nerek



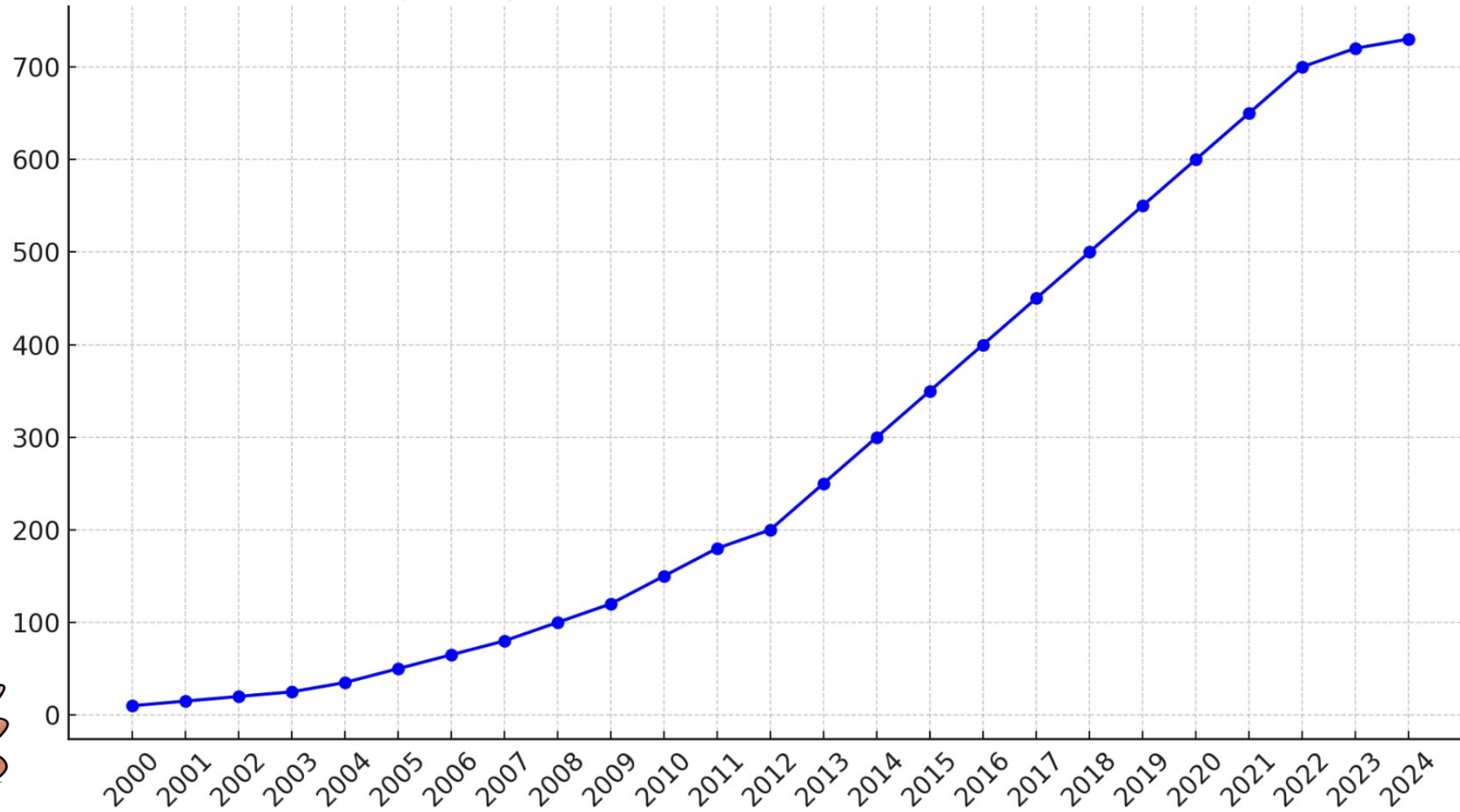
Wymiana nerek



Wymiana nerek

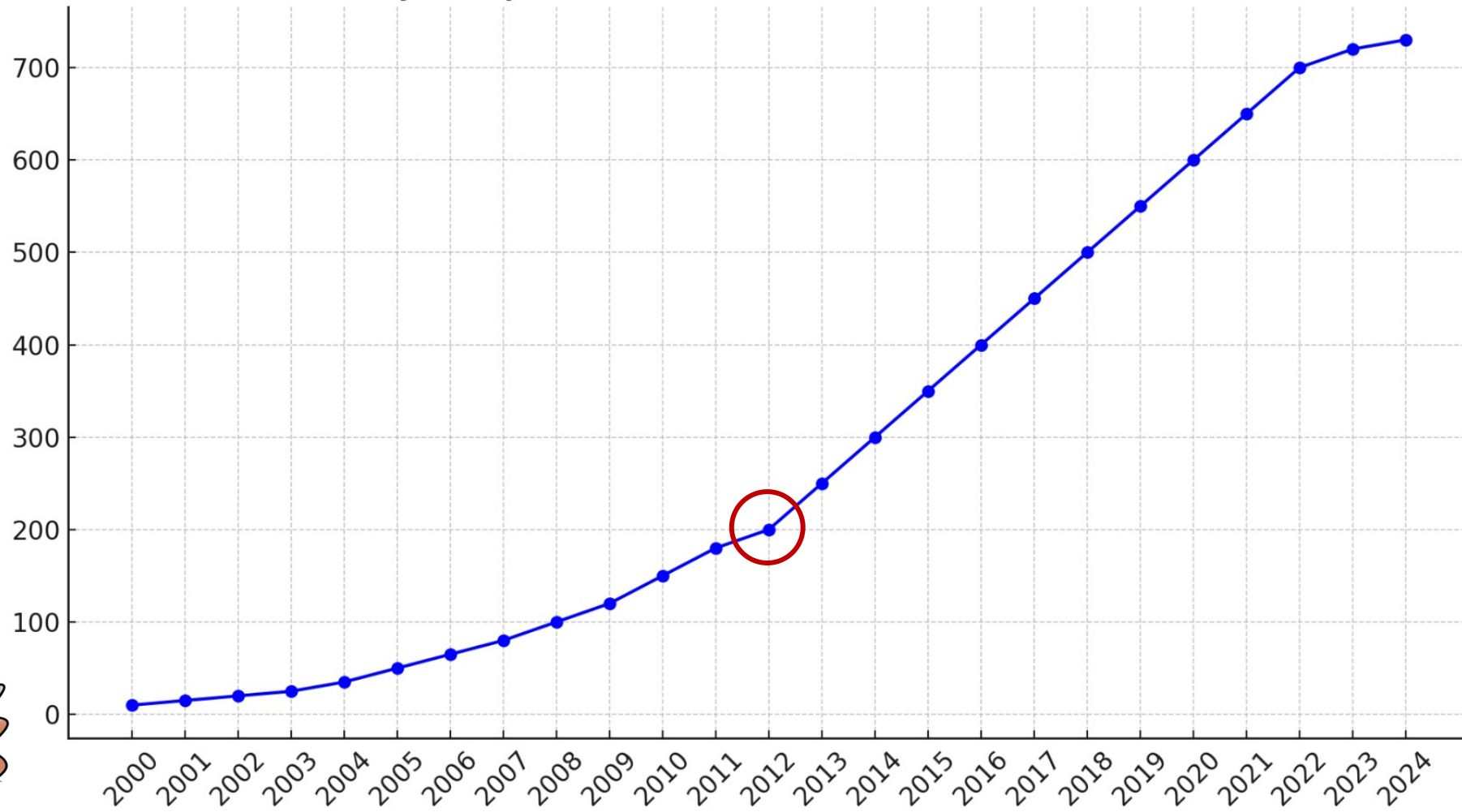


Liczba przeszczepów krzyżowych w USA*



* wykres wygenerowany przez ChatGPT, dane mogą być zmyślone

Liczba przeszczepów krzyżowych w USA*

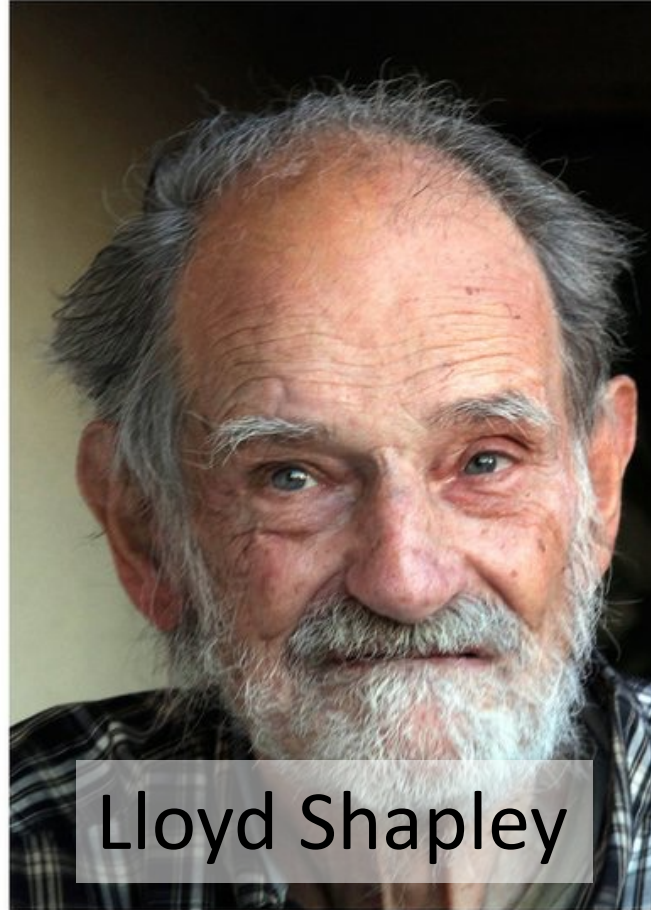


* wykres wygenerowany przez ChatGPT, dane mogą być zmyślone

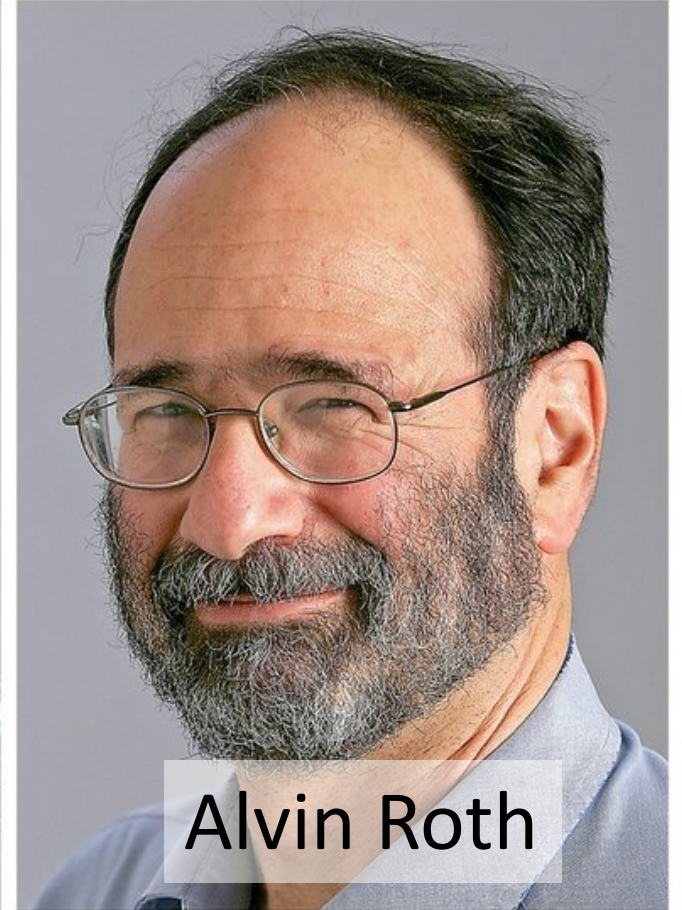
*„za teorię stabilnych alokacji
i praktykę projektowania rynków”*



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2012



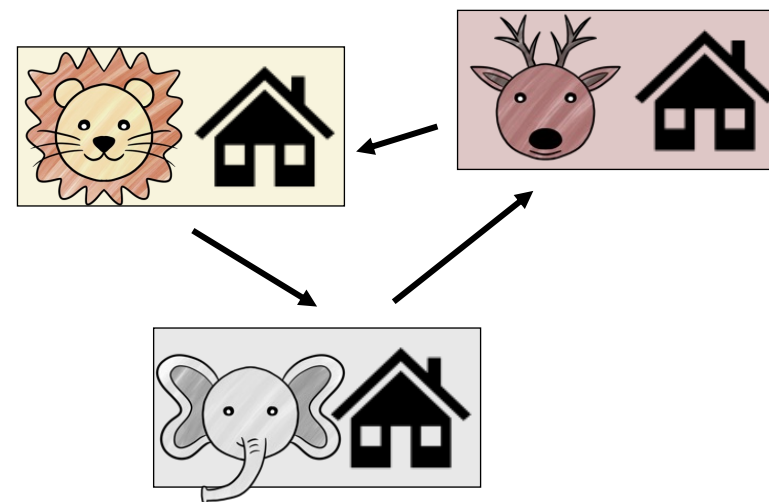
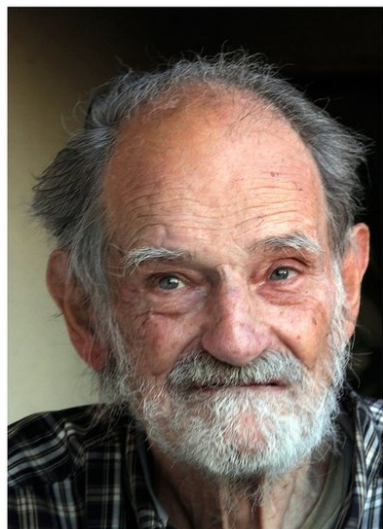
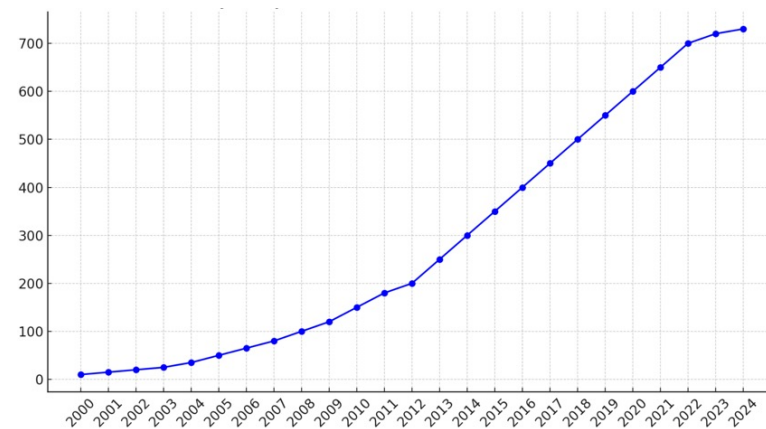
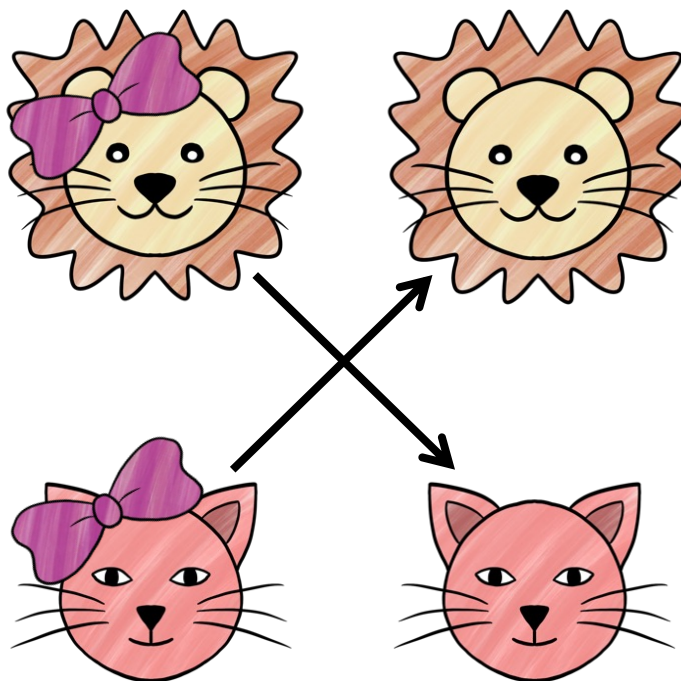
Lloyd Shapley



Alvin Roth

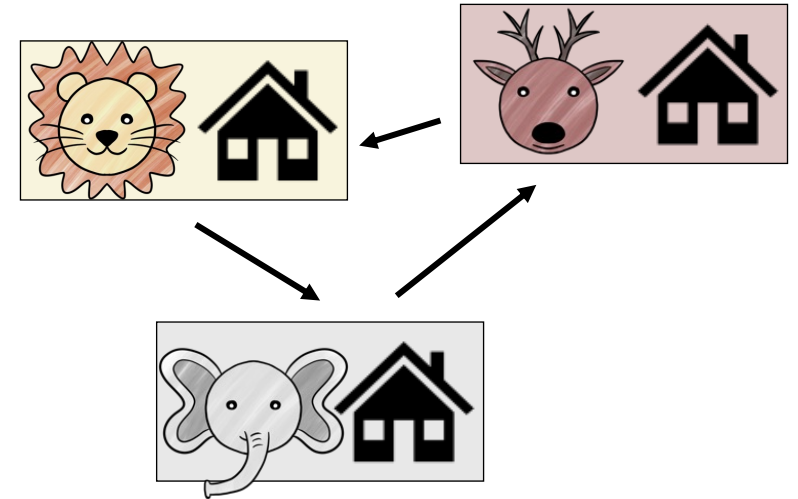
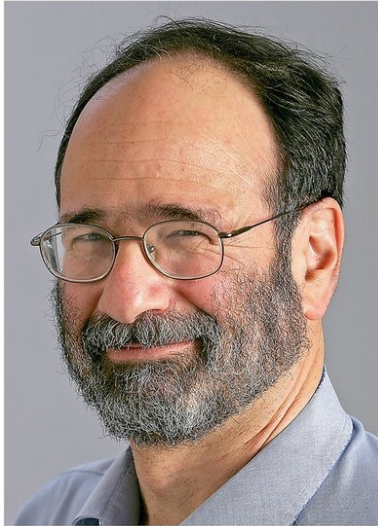
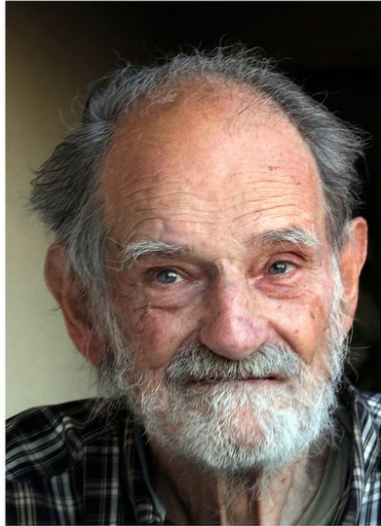
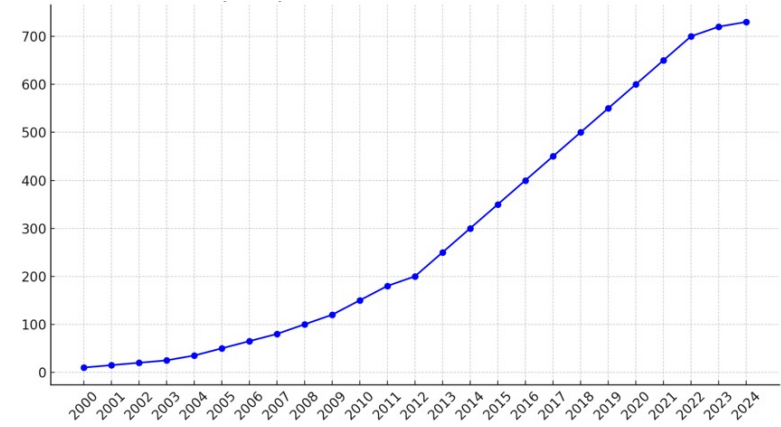
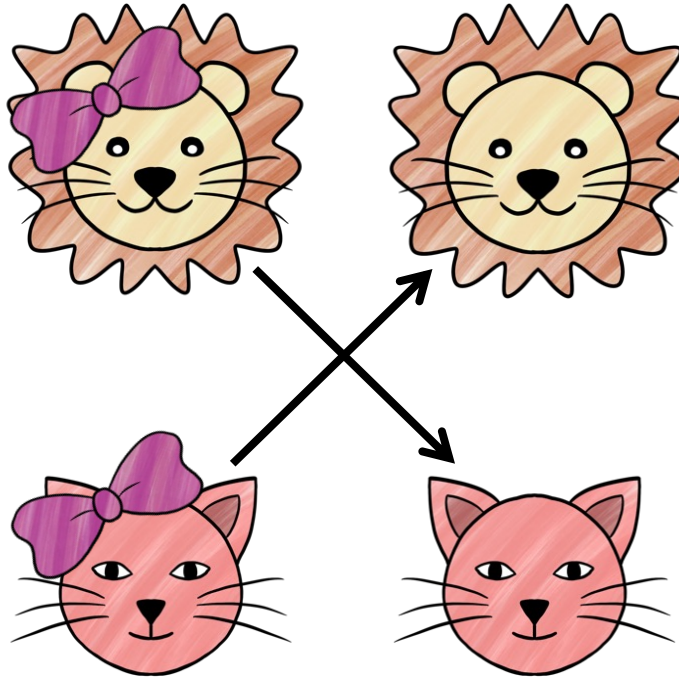


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