

The gift in donations

ANATOMICAL DONATIONS AS A MEDICAL CHOICE OR AS AN IDENTITY TRAIT?

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Institute of Biomedical Ethics
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ME ↓



2012: BA in Philosophy @ UniPD

2015: MA in Philosophical Sciences @UniPD

2017: International Research Fellow @RUB, Institute for Medical Ethics and History of Medicine

2022: PhD in Medical Sciences @UZH, Institute of Biomedical Ethics and History of Medicine

Ongoing projects:

- DIPEX data management
- Boosting Public Discourse: Towards a Targeted, Evidence-Based Strategy to Improve Moral Reasoning
- Pandemics & Bioethics: Co-Designing a Graphic Novel
- Scoping review background document for the WHO-convened ethics panel on ethical considerations of infodemic management, with a particular focus on social listening

Other fancy stuff:

TEDx speaker @Trento 2016

Scientific coordinator of Academia Engelberg 2019

Open Science Ambassador @UZH

Guest editor @ International Journal of Public Health

Reviewer for a bunch of journals (including Medicine, Health Care and Philosophy, PLOS One,

Reviewer for Public Health Ethics, JMIR, MHEP, ...)

Paragliding pilot and nerd, big fan of cows

<https://orcid.org/0000-0002-6812-0979>

AIMS

1. Present and characterize the medical and scientific differences between different kinds of anatomical donations;
2. Analyze the theoretical production around the idea of gift;
3. Propose a new theoretical model;
4. Analyze a case study to reflect on the results of its practical implementation in donor recruitment

TOPICS

1. Organs and tissues
2. Blood
3. HSCs
4. Regulatory framework
5. A problem, some solutions
6. The gift in donations
7. (If there's time) Città del Dono

CONFLICT OF INTEREST



Organs and tissue

Organs and tissue

Healing of the deacon Justinian, Beato Angelico, 1443:

Saints Cosmas and Damian operate the “black leg miracle”.



Organs and tissue

Organs:

organized groups of tissue carrying out one (or more) specific functions

Tissues:

organized groups of cells carrying out (usually) one specific function

Transplant:

Replacement of a nonfunctional/damaged/missing organ (or tissue) with a healthy, functional one.

Requires deceased/living donors and/or tissue banks.

Organs and tissue

A minimal timeline:

The first experiments: the nose autografts of Gaspare Tagliacozzi (1545)

The Basics of Transplant Surgery: Alexis Carrel and surgical anastomosis (~1904)

Understanding the dynamics of rejection: Snell, Baruj, Benacerraf, Dusset (~1950s)

The solution to the problem of rejection: from total body X-rays to cyclosporine (~1970s - ~1980s)



Organs and tissue

The first successful human organ transplant:
Murray and the Herrick twins (1954)

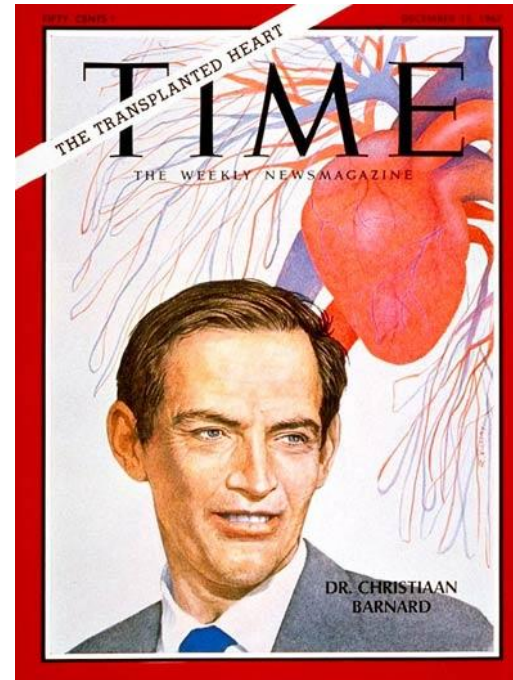
Liver transplant: Starzl's first attempts (1963) and
Calne's success (1979)

Lung transplant: Hardy's attempt (1963) and
Cooper's success (1983)

Pancreas transplant: the success of Lillehei (1966)

Heart transplant: Carrel and Guthrie's experiments
(1905); Hardy's xenotransplantation (1964),
Barnard's success (1967)

Intestine transplant: the experiments of Lillehei
(1958) and the success of Starzl (1987)



Organs and tissue



Organs and tissue

Tissue transplantation:

Corneas (deceased donor);

Bone and tendon segments (deceased and living donor, for example in the case of hip replacement surgery with total replacement of the femur head);

Blood vessels (deceased and living donor, in case of safenectomy for the therapy of varicose veins);

Skin (deceased and living donor);

Heart valves (deceased donor);

Amniotic membrane (only post-partum from living donor).



© FBOV Mestre

Blood

Blood

Blood:

Liquid tissue with the function of delivering oxygen and nutrients, transporting metabolic waste, circulating the immune system cells and platelets

Transfusion:

Transferring of blood/blood components to a patient, usually in the context of:

Traumatology;

Programmed surgery;

Organ transplantation;

Oncological therapy;

Treatment of haematological diseases.

Requires living donors and blood/blood components banks

Blood

A minimal timeline:

Cardano describes direct transfusion in *De rerum varietate* (1558)

Denys and Riva experiment with blood transfusion with random successes (1667)

Aveling realizes the first direct man-to-man transfusion (1873)

Landsteiner discovers the ABO system (early 1900s)

Landsteiner and Wiener discover the Rh system (1940)

Introduction of the ACD solution - acid, citrate, dextrose (1943)



HSCs

HSCs

Hematopoietic stem cells:

Cells located in the red bone marrow, with the function of producing red blood cells, white blood cells, and platelets.

HSCs Transplantation:

Replacement of the patient's bone marrow, damaged or destroyed by disease, infection or chemotherapy, usually in the context of hematological/hemato-oncological diseases.

Requires living donors.

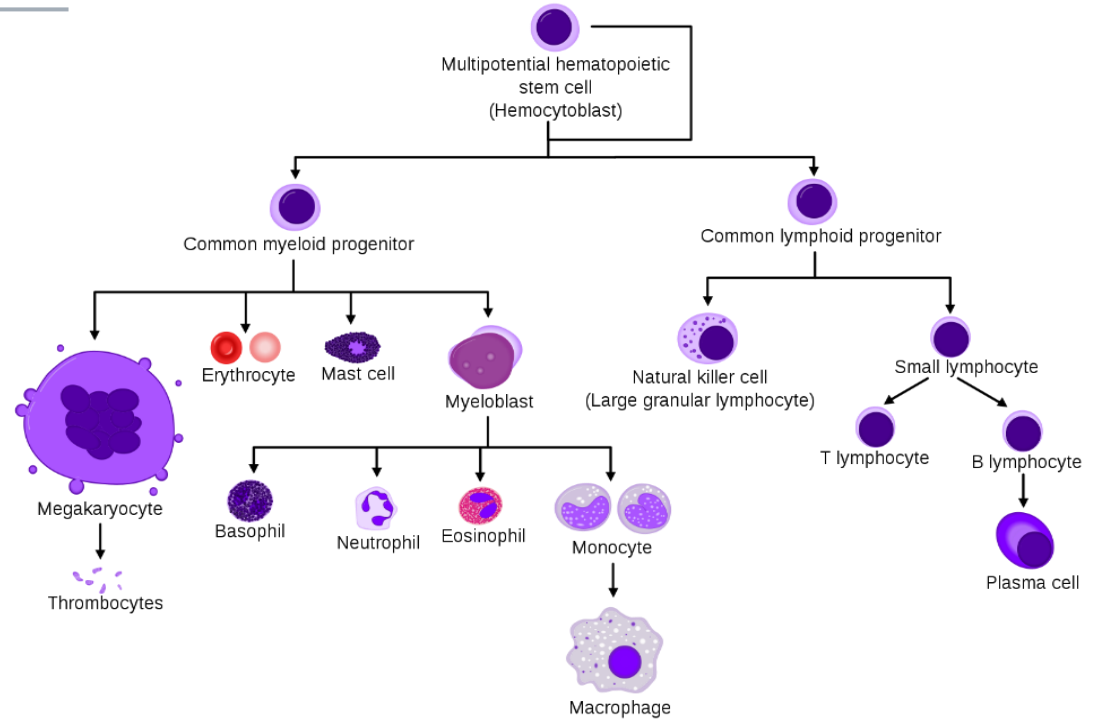
HSCs

A minimal timeline:

The first trial: Morrison and Samwick's "sternum to sternum" transplant (1940) on a patient with aplastic anemia

The second attempt: the 24 leukemic patients of Mathé (1959)

Don Thomas: twenty years of research at the Fred Hutchinson Cancer Research Centre (1950s - 1970s)



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Regulatory framework

Regulatory framework

Oviedo Convention (1997)

Protection of human rights, fundamental freedoms and dignity of the human being both as an individual and as a species.

Ethical primacy of the person (over science or society)

Equitable access to health care

Residuality of living donations

Obligatory consent

Gratuity

Strasbourg additional protocol (2002)

Additional protocol dedicated to organ and tissue donation

Need to increase the donor pool in an ethically acceptable way

Need to prevent the human body and its parts from becoming a market

Transparency and fairness in allocation

Impartiality of the medical committee determining death

Both opt-in and opt-out are acceptable

Gratuity

A problem, some solutions

LACK OF ORGANS

Italy and Switzerland, 2018

	Waiting List	Transplants
IT	8 876	3 725 (41,97%)
CH	1 412	599 (42,42%)

SIT, Attività di donazione, 2018

Swisstransplant, Jahresbericht, 2018

LACK OF HSCs

Italy and Switzerland, 2018

	Waiting List	Transplants	Donor pool
IT	1 763	820 (46,51%)	416 852
CH	230	144 (62,61%)	129 472

IBMDR, Report di attività, 2018
Blutspende SRK Schweiz, Zahlen, 2018

...A LITTLE BIT BETTER

Blood and blood components, 2018

	Transfusions	Donations
IT	2 995 920	2 991 082 (99,84%)
CH	290 559	277 808 (95,61%)

CNS, La donazione in cifre, 2018
Blutspende SRK Schweiz, Zahlen, 2018

A problem, some solutions

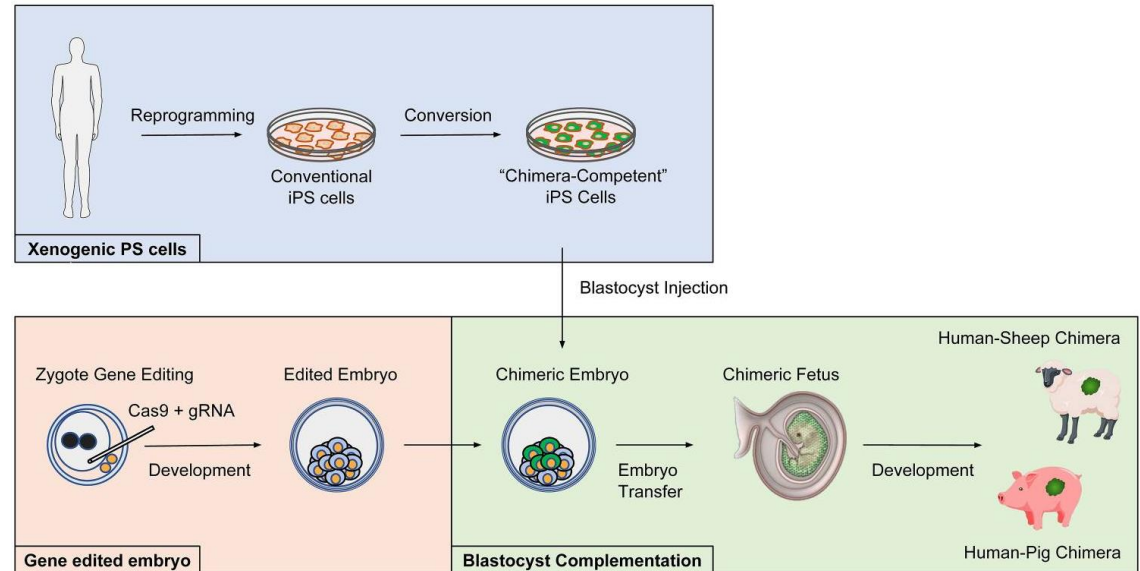
Xenotransplantation:

Obtaining organs from interspecies chimeras
(human-pig/sheep/...

Physiological compatibility issues
Hyperacute rejection
Infective risk

“It is not known whether it will be possible to engineer human organs without contaminating animal host-derived nerves and vasculature, which is clinically problematic. Fundamental problems remain, such as how best to resolve differences in developmental speed and to overcome distinct developmental processes that have arisen from evolution.”

(Alejandro De Los Angeles, Nam Pho and D. Eugene Redmond, 2018)



© De Los Angeles, Pho and Redmond, 2018

A problem, some solutions

Artificial organs:

Mechanical devices replacing the function of an organ

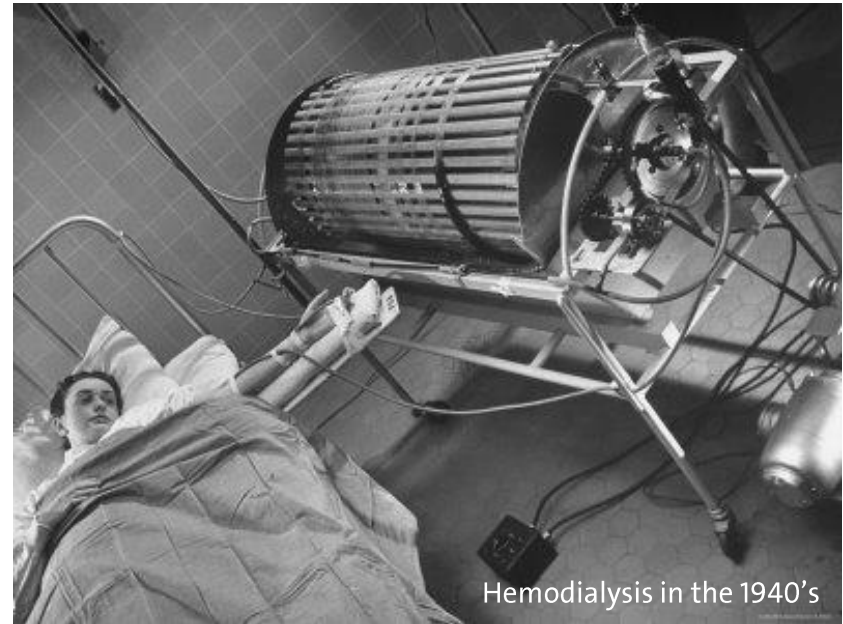
Hemodialysis systems (Kolff, 1943)

Artificial or bioartificial liver (MARS, 2004)

Dennis's Heart-Lung Machine (1951)

Implantable Artificial Heart: Jarvik 7 (1971)

Currently even the most advanced systems are only temporary bridge solutions
(Paul S. Malchesky, 2018)



A problem, some solutions

Illegal organ trafficking:

The market mainly regards mainly kidneys, to a lesser extent split livers.

Costs for patients around \$100 000 – \$200 000 (COE, 2003);

Median compensation for sellers \$2 133 (in the Philippines) (Roger Lee Mendoza, 2010);

Significant risks for both patients and sellers;

At least problematic from an ethical standpoint

lalith says:

June 14, 2014 at 2:16 am



sir,i am lalith jain from bangalore,i want to sell my kidney,blood group is ab positive,age 36,healthy fit and fine,num-9972942389,,9341397614,mail-lalith_jain2000@yahoo.comif u are seriuos then only call

john says:

June 14, 2014 at 10:29 am



~~~~~

I want to sale my kidney FOR FINANCIAL REASON. I'm 33 years old. weight 70 K.G.,My blood group is O+(O positive). Can travel anywhere (conditional). MAIL ME THROUGH:

[garfieldjohn80@yahoo.com](mailto:garfieldjohn80@yahoo.com)

[www.ineedakidneynow.org](http://www.ineedakidneynow.org), 2014

# THE SOLUTION

- Increase the number of new donors (in an ethically acceptable way)
- Bridge donors across categories (“global donor”)

# A problem, some solutions

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Quantitative analysis on 314 papers and qualitative analysis of 71 papers, aiming to assess the influence of consent models, donor registries and family decision on organ donation rates.

- There is still **no clear evidence of a direct causal role of the will expression model in the donor rate** and no reliable estimate of the extent of the effect. The indications that an opt-out model can positively influence the donor rate have, however, become more concentrated.
- The **involvement of relatives** in the decision-making process and the associated approval rate continues to be the **central pivotal point** for the increase of organ donation rates. Although there is a large number of studies on individual factors influencing the decision-making process of relatives, there is currently no conclusive study on whether and how the model of expression of will directly influences the consent rate of relatives.
- **Cultural and socio-economic factors** are important boundary conditions for an organ donation system with high donation rates; in unsuitable contexts, a change of will expression model can have effects that contradict the desired goal.
- Finally, it should also be noted that **organizational factors** surrounding the processes of donor identification and, in particular, the **professional treatment of relatives**, continue to be regarded as central to increasing the donor rate.

(Markus Christen, Holger Baumann and Giovanni Spitale, 2018)

# A problem, some solutions

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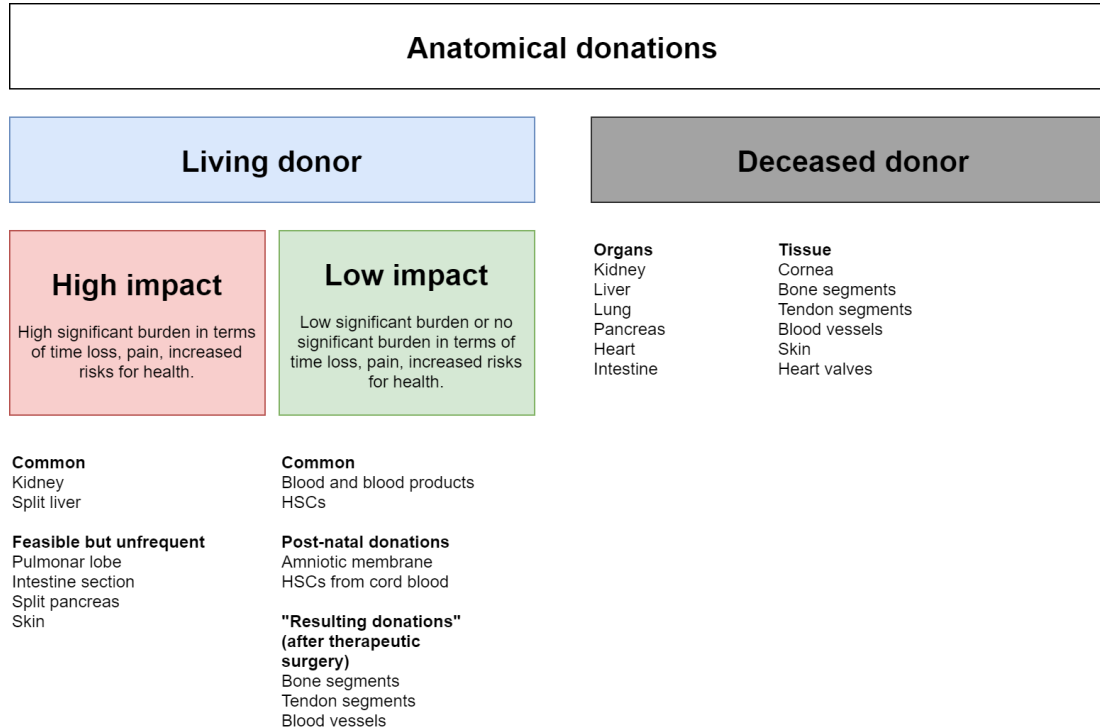
Quantitative analysis on 380 questionnaires assessing the reasons for becoming or not becoming potential HSCs donors after an informative intervention in Italian high schools.

- The stronger group of reasons for **refusing** is **fear** (of needles, blood, hospitals, increased health risks)
- The strongest groups of reasons for **accepting** are **personal narratives** (of donors and receivers), followed closely by **quality of information**

(Giovanni Spitale, Il dono nelle donazioni, 2015)

# The gift in donations

# The gift in donations





# ONE COMMON IDEA: GIFT

But how do we understand it?

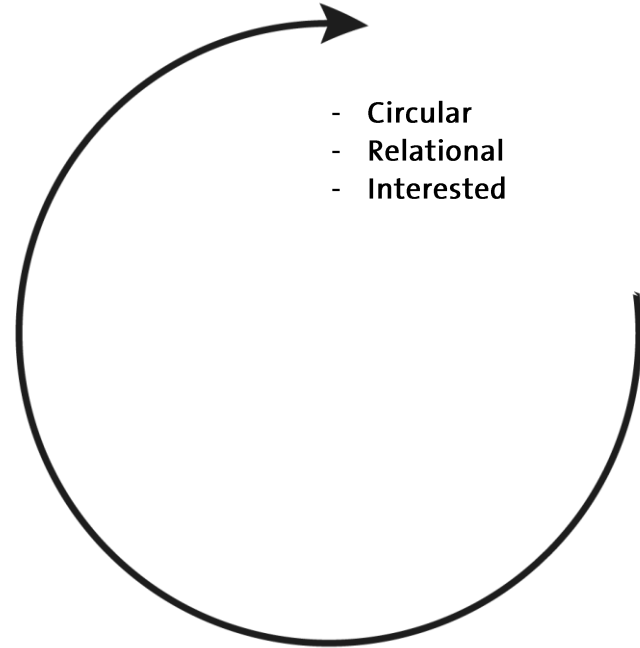
# The gift in donations

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## **Nexum, Wadium, Xenia: gift as relational grammar**

“the principle of the exchange-gift must have been characteristic of societies that have gone beyond the "total performance" stage (from clan to clan, from family to family) but that have not yet reached the purely individual contract, the market in which the money circulates, the sale as we understand it and, above all, the notion of price, calculated in currency whose weight and title is determined.”

(Marcel Mauss 1925)



# The gift in donations

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[...] There they found Nestor sitting with his sons, while his company round him were busy getting dinner ready, and putting pieces of meat on to the spits while other pieces were cooking. **When they saw the strangers they crowded round them, took them by the hand and bade them take their places. Nestor's son Pisistratus at once offered his hand to each of them, and seated them on some soft sheepskins that were lying on the sands near his father and his brother Thrasymedes. Then he gave them their portions of the inward meats and poured wine for them into a golden cup, handing it to Minerva first, and saluting her at the same time. [...]**

By and by, when the outer meats were roasted and had been taken off the spits, the carvers gave every man his portion and they all made an excellent dinner. **As soon as they had had enough to eat and drink, Nestor, knight of Gerene, began to speak.**

**"Now," said he, "that our guests have done their dinner, it will be best to ask them who they are. Who, then, sir strangers, are you, and from what port have you sailed? Are you traders? or do you sail the seas as rovers with your hand against every man, and every man's hand against you?"**

(Odyssey, III, 34-41)

# The gift in donations


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## Vertical gift

Gratuity not as mere absence of economic value, but a complete abolition of exchange logic, in favor of a complete asymmetry. In the Old Testament the Creation is a gift in itself, and giving is a prescribed behavior in multiple passages as *imitatio dei*.

In the New Testament the concept of gift becomes even more radical and unmatchable in the gift of forgiveness, again, prescribed as *imitatio dei*.

(Carmine Di Sante 2012)

- 
- Vertical
  - Absolute
  - Unmatchable
  - Disinterested
  - Non-reciprocable

# The gift in donations

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***Imitatio dei* (Lev. 19:2):**

Say to all the people of Israel, You are to be holy, for I, the Lord your God, am holy.

**Prescription to donate to those who cannot materially reciprocate (Deu. 14:29):**

And the Levite, because he has no part or heritage in the land, and the man from a strange country, and the child who has no father, and the widow, who are living among you, will come and take food and have enough; and so the blessing of the Lord your God will be on you in everything you do.

**Forgiveness as the highest form of non-reciprocable gift (Luke 6:32-35):**

If you have love for those who have love for you, what credit is it to you? for even sinners have love for those who have love for them. And if you do good to those who do good to you, what credit is it to you? for even sinners do the same. And if you let those have the use of your money, from whom you are hoping to get it back, what credit is it to you? even sinners do so to sinners, hoping to get back as much as they gave. But be loving to those who are against you and do them good, and give them your money, not giving up hope, and your reward will be great and you will be the sons of the Most High: for he is kind to evil men, and to those who have hard hearts.

# A BROKEN NARRATIVE?



## Reciprocity

This is not a gift: the intentionality of the giver is projected on who receives the gift. It is just an economic exchange. If a gift *appears* as a gift, then it is not a gift.

(Jacques Derrida 1991)

## Realizability

This is an asymptotic gift: the ontological alterity that God has to humans (fundamental to avoid reciprocability) is impossible among humans. Hence it's as impossible as the circular model.

(Giovanni Spitale 2015)

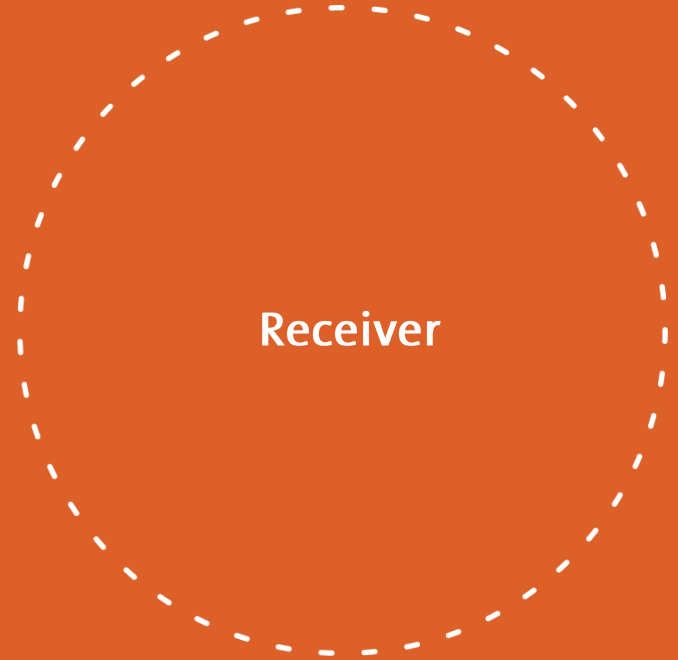


# ANONIMITY AND POINT-TO-SET RELATION

Donor/  
relatives



Receiver

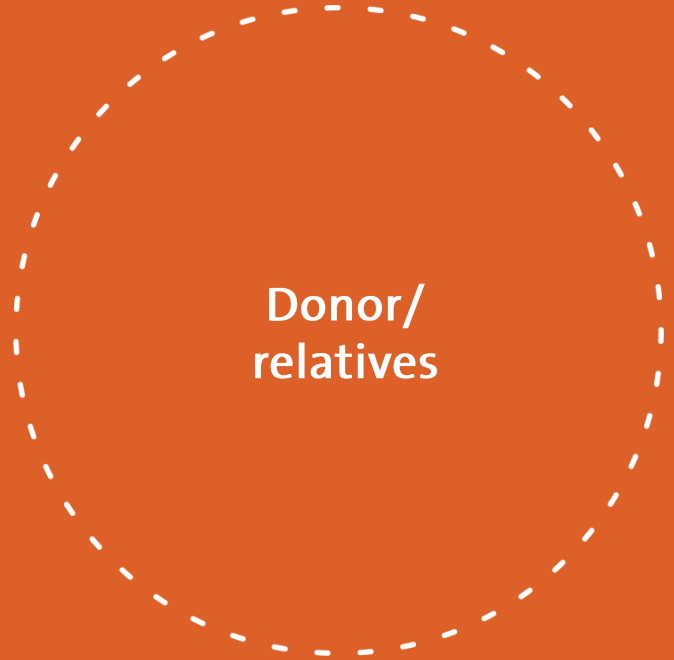


# ...THE OTHER WAY ROUND

Receiver



Donor/  
relatives





# The gift in donations

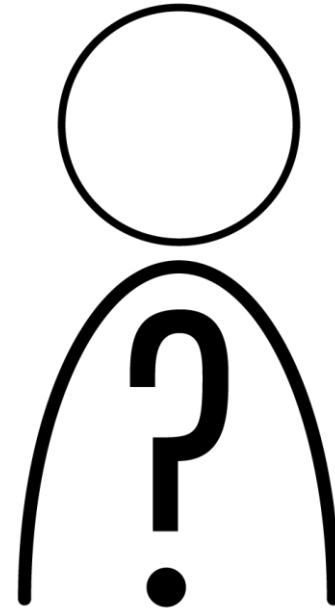
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## The case for anonymity

- Avoids every possibility of reciprocity
- Avoids the need of ontological alterity to exclude reciprocability
- Keeps in place a “relational grammar”, not with an individual person but with a set, including that person (or the relatives)
- The intentionality of the donor cannot be projected on the receiver

Moreover, it's a theoretical model that can work for every anatomical donation (excluding conditional high impact living donations)

(Giovanni Spitale 2015)



**CITTÀ DEL DONO**

# Città del dono

## The original idea:

- Collecting and registering citizens' wills on *ex mortuo* organ donation when issuing or renewing the ID card (every 5 years in 2011, now every 10 years);
- Reframing the choice about organ donation: from a medical decision to an identity trait;
- Preparing and testing a training package (for civil officers) and a communication package (for the public)

(Giuseppina Manuali 2011)

**UNA SCELTA IN COMUNE**  
Esprimi la tua Volontà sulla Donazione di Organi e Tessuti

A CHOICE AT CITY HALL  
A CHOICE FOR THE COMMUNITY  
Declari per il tuo futuro la Donazione di Organi e Tessuti

UNA ACCIÓN PARA EL BIEN COMÚN  
Expresar la voluntad acerca de la Donación de Órganos y Tejidos

**INFORMATI, DECIDI E FIRMA.**

**DAL 2006**  
LA REGIONE UMBRIA È IN PRIMA LINEA PER INFORMARE I CITTADINI SULLE MODALITÀ PREVISTE DALLA LEGGE ITALIANA (legge n. 91 del 1 aprile 1999) PER DICHIARARE LA PROPRIA VOLONTÀ SULLA DONAZIONE DI ORGANI E TESSUTI. Un impegno costante per sostenere la donazione quale gesto di responsabilità e di altruismo. Grazie ai progressi della medicina, il trapianto è una terapia efficace e sicura che offre una concreta possibilità di cura ai pazienti in attesa di trapianto.

**DA OGGI**  
QUESTO IMPEGNO SI RAFFORZA. La regione Umbria e Federazioni Anzi lanciano "Una scelta in Comune", un progetto-pilota per permettere a chi richiede o rinnova la carta d'identità di esprimere il proprio consenso o diniego alla donazione, firmando un semplice modulo. Questa possibilità, introdotta di recente (legge di Conversione in legge 2010 n. 25, nota come "Milleproroghe"), include nelle vigenti modalità di registrazione della propria volontà anche gli uffici anagrafe dei Comuni.

**COME E DOVE DICHIARARE LA PROPRIA VOLONTÀ**

I CITTADINI MAGGIORANZI CHE INTENDONO ESPRIMERE LA PROPRIA VOLONTÀ e registrarla sul Sistema Informativo Trapianti (SIT), possono farlo:

- 1 ► **Firmando** un modulo che sarà consegnato in occasione del rilascio/rinnovo della carta d'identità all'ufficio anagrafe.
- 2 ► **Compilando e firmando** un modulo che si può richiedere alla AnI di appartenenza.
- 3 ► **Firmando** l'atto olografo dell'Associazione Italiana Donatori di Organi (AIDO), grazie alla convenzione tra il Sistema Informativo AIDO (SIAI) e il Centro Nazionale Trapianti, tutte le dichiarazioni raccolte confluiscono nel SIT.

SONO ALTRETTANTO VALIDE, AI SENSI DI LEGGE, LE SEGUENTI MODALITÀ PER DICHIARARE IL PROPRIO CONSENSO O DINIEGO ALLA DONAZIONE.

- 4 ► **Compila e firma** la Tessera Regionale del Donatore o le tessere delle Associazioni di Donatori e Mutati. Ricordi di portarla sempre con te.
- 5 ► **Scrivi** su un foglio libero la tua volontà, ricordandoti di inserire i dati anagrafici, la data e la tua firma. Anche in questo caso, controllaci la tua dichiarazione nel portafoglio.

In collaborazione con:  
Regione Umbria, AIDO, SIT, CNIT, Centro Nazionale Trapianti

Regione Umbria, 2013

# REGISTERED WILLS IN UMBRIA

(The percentage in brackets is the amount of positive wills, i.e. potential organ donors)

|        | <b>1999-2012</b> | <b>2015</b>   | <b>2019</b>    |
|--------|------------------|---------------|----------------|
| Umbria | 4 727 (90,9%)    | 9 230 (96,7%) | 93 444 (74,3%) |

SIT, Dichiarazioni di volontà, 2019

# Città del dono

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## **A natural laboratory:**

43 347 inhabitants, not too big, not too small, just an average small city in NE Italy

In 2015:

1 019 registered wills on organ donation (85,7% positive)

6 650 blood donors

909 registered potential HSCs donors

3 blood donors' associations

1 HSCs donors' association

1 organ donors' association

No previous institutional activity about anatomical donations



# Città del dono

## Objectives:

- Increase the number of donors, promote “global donation”
- Coordinate the actions of the associations within a common framework, both organizational and ethical
- Apply law 98/2013 (=the Umbrian system)
- Extend the Umbrian system to other anatomical donations



BASSANO

CITTÀ DEL  
DONO



# Città del dono

## Outcomes:

- Realization of coordinated communication and training packages (booklet, flyer, website, videos, ...) incorporating the point-to-set model of gift as a theoretical foundation, and providing information on all anatomical donations
- Dissemination over a series of informational events
- +4 289 registered wills on organ donation in 2 years (70,6% positive), +670 blood donors, +732 HSCs donors
- DDL 2645: new law presented to the Senate to extend the Umbrian system also to blood and HSCs
- Extension of the experimentation to other 5 municipalities

**ORGANI E TESSUTI**  
ETÀ (CANDIDATO DONATORE): 18+

Gli organi che, **dopo la morte**, si possono prelevare per la donazione sono i reni, il fegato, il cuore, il pancreas, i polmoni e l'intestino, mentre i tessuti sono le cornee, il tessuto osseo, le cartilagini, i tendini, la cute, le valvole cardiache, i vasi sanguigni.

**A COSA SERVONO?**  
Il trapianto serve a curare **insufficienze d'organo gravi, spesso non trattabili in altro modo**. Gli organi donati vengono trapiantati a pazienti selezionati tra tutti quelli iscritti in lista di attesa: la selezione del ricevente è effettuata in base a **criteri oggettivi e trasparenti** (gravità clinica e compatibilità immunologica) che favoriscono la **massima riuscita** del trapianto. I tessuti prelevati possono essere conservati in banche appositamente attrezzate prima di essere utilizzati sul ricevente.

**COME SI DONANO?**  
Questo tipo di donazione si realizza **solamente dopo la morte**, accertata osservando l'**assenza completa ed irreversibile di attività cerebrale** per almeno 6 ore, oppure l'**assenza completa di battito cardiaco** per almeno 20 minuti. Entrambi i criteri sono **assolutamente sicuri**. Il team medico che realizza il prelievo, diverso da quello che accerta il decesso, **tratta con il più grande rispetto** il corpo del defunto. Per donare organi e tessuti basta compilare una **dichiarazione di volontà**.

**INFO**

<http://bassano.cittadel dono.it>

**COMUNE DI BASSANO DEL GRAPPA**  
Via Matteotti 39, 36061 Bassano del Grappa (VI)  
0424519555 - urp@comune.bassano.vi.it

**AZIENDA SANITARIA ULSS 7 PEDEMONTANA**  
**BASSANO DEL GRAPPA**  
Via dei Lotti, 40 36061 Bassano del Grappa (VI)  
0424 888 556/7 - urp@asl.bassano.it

**IN COLLABORAZIONE CON:**

**REGIONE DEL VENETO**  
**ULSS7**  
PEDEMONTANA

**ADMO**  
ASSOCIAZIONE ITALIANA MIDOLLO OSSEO  
0444 752537 - 389 9032198  
admo@vicenza.admo.it  
www.admo.it

**aido**  
333 8982134 - 0464 543379  
vicenza.provincia@aido.it  
aido@bassano@gmail.com  
www.aido.vicenza.it

**AVIS**  
366 9421639 - 391 2187733  
bassano@gruppa.comunale@avis.it  
www.avis.it

**FIDRS**  
FEDERAZIONE ITALIANA DONATORI DI SANGUE  
371 192845  
bassano@fidrs.vicenza.com  
www.fidrs.vicenza.com

**Comune di Bassano del Grappa**  
0424 889878  
segreteria@nd.bassano.vi.it  
www.nd.bassano.vi.it

**BASSANO**



**CITTA' DEL DONO**



Comune di Bassano del Grappa

giro di poche settimane.

Per donare sangue basta essere in **buona salute**, pesare **più di 50 kg** ed avere uno **stile di vita corretto**.

Anche per donare il midollo osseo basta essere in **buona salute**, pesare **più di 50 kg** ed avere uno **stile di vita corretto**.

**MIDOLLO OSSEO**  
ETÀ (CANDIDATO DONATORE): 18-35

Il midollo osseo è la fabbrica del sangue: si trova nelle **ossa lunghe** e nelle **ossa piatte, non nella colonna vertebrale!** Quello è il midollo spinale, tutta un'altra storia. E' composto principalmente da **cellule staminali emopoietiche**, che producono globuli rossi, globuli bianchi e piastrine.

**A COSA SERVE?**  
Il trapianto di midollo osseo spesso è il **solo modo** per curare malattie molto gravi, ad esempio leucemie, talassemie, linfomi. **Trovare un donatore compatibile è difficile**: le probabilità sono solamente **1:100.000**. Ogni anno in Italia circa 600 persone in attesa di trapianto non trovano un donatore; è per questo che incrementare il numero dei donatori potenziali è **fondamentale**.

**COME SI DONA?**  
Per diventare un **potenziale donatore** di midollo osseo basta fare la **tipizzazione**, un semplice esame del sangue. I biologi analizzano la compatibilità ed inviano i dati ad un grande database mondiale. Solo se c'è un paziente compatibile in attesa si procede al trapianto. Il midollo osseo viene prelevato dall'**osso del bacino in anestesia**, oppure dal **sangue periferico** (dopo l'assunzione di un farmaco). Il midollo osseo donato si **riforma completamente** nel giro di poche settimane.

Anche per donare il midollo osseo basta essere in **buona salute**, pesare **più di 50 kg** ed avere uno **stile di vita corretto**.

# Città del dono

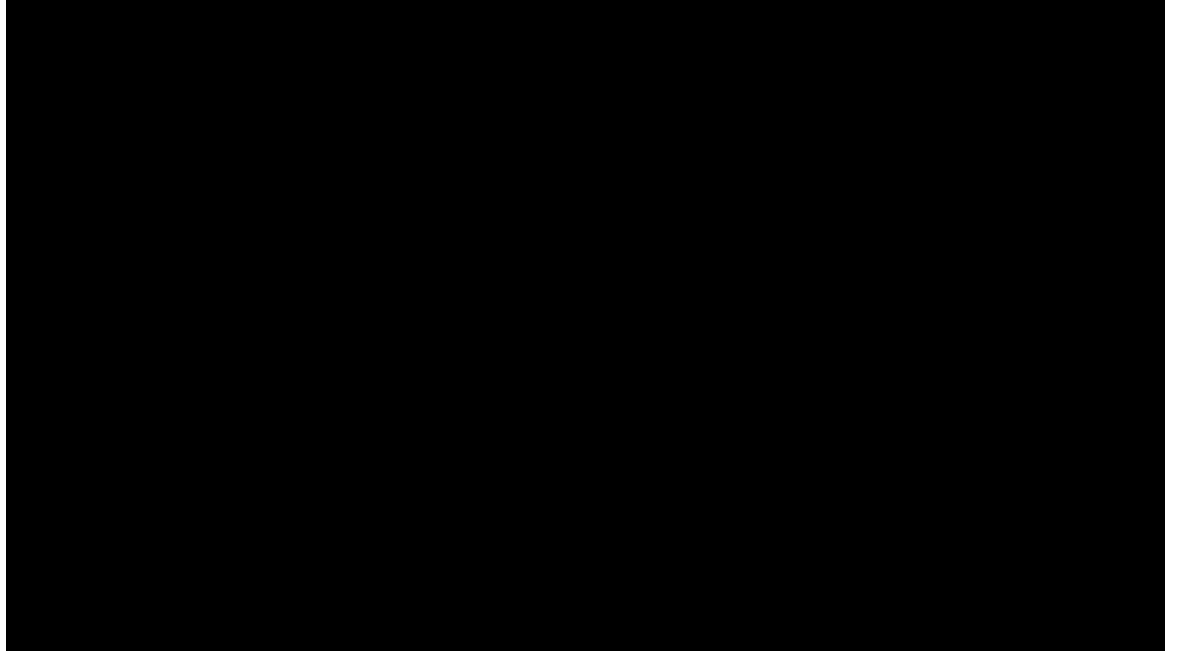
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“Have you ever dreamed of doing anything exceptional?”

Giving a part of yourself changes two lives.

In Bassano you can become an organ donor and learn about blood and HSCs donation when you renew your identity card.

So easy, so much more important.”





# DISCUSSION

# SUMMARIZING

## Characterizing anatomical donations

Ex vivo

High impact

Low impact

“resulting donations”

Ex mortuo

## The concept of “gift”

Circular model

Vertical model

Anonymity and point-to-set relationship

## Strategies to increase the number of transplants

Xenotransplantation

Artificial organs

Black market

More donors, “global donors”

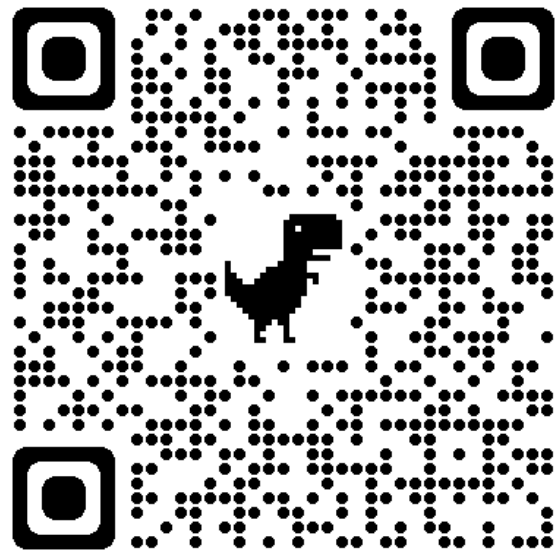


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