The Value of Blood: The Shifting Meanings of Gift and Commodity in Hungarian Plasma Donation

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Abstract

Even though plasma is a component of whole blood, plasma donation as a social practice is very different from blood donation. Since plasma donation involves financial compensation and the harvested plasma goes through more complex biotechnological treatments and global economic transactions until it reaches its recipients, the Titmussian model of 'blood as gift' and donation as citizen-making (1970) cannot be adopted in this case. In Hungary, plasma is procured by profit-oriented organizations which creates tensions and interconnections between altruistic and economic motivations and narratives, both in the case of donors, staff, and the institution itself. Rather than extinguishing each other or the economic factors eliminating the altruistic ones, the two work in tandem in the different stages of procurement. The thesis explores how these tensions are generated and managed in a Hungarian plasma center in Budapest, how plasma is both presented as gift and commodity. Through the methods of carnal sociology (Wacquant 2014), participant observation, and semi-structured interviews it is revealed how the certain material traits of plasma, the process of donation, the interactions within the center, and the communication of the institution itself emphasizes, suppresses or ties together the altruistic or commercial aspects of plasma donation. Diverging from the previous, mostly donor-oriented studies, the thesis combines the analysis of human and non-human (plasma) interactions, and briefly considers material factors that enable commercialization or altruism.

Keywords: plasma donation; altruism; gift; commercialization; biological labor

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Introduction

Blood is national, plasma is global, declared in Farrugia 2009, 125

However, the equation might not be as simple as that. Blood is a multivalent symbol. It is seen as a gift and a source of risk at the same time – an object of national, institutional, or even global management. Depending on its place it can be an object of purity or pollution. When it is 'in place', it is safe and manageable, when it is 'out of place', it is carrying danger and risk. When it is properly donated, it is a life-giving substance. When it is pouring out of the body uncontrollably (nosebleed, menstruation), it is contamination (Mahon-Daly 2012, 57). Unlike organs, blood is a renewable substance, transferable between individuals and communities, and as such, it can be turned into a commodity even more easily (Mahon-Daly 2012, 66).

The first blood banks were established in the 1940s, and in the early years of transfusion whole blood was stored. The development of fractioning techniques in the US in the 1950s and 60s allowed the manufacturing of products from plasma proteins. Plasma could be stored in one place and shipped when needed. Subsequent biomedical technologies allowed blood to be broken down into further components, each with different therapeutic qualities and storage needs. Contemporary transfusion medicine is characterized by using different components of blood according to patients' clinical needs and fractioning one unit of blood to be utilized to cure several different patients. No component goes to waste. Plasma can be used in immunology, oncology, neurology, replacing fluid loss after trauma, and its coagulation factors to alleviate symptoms of bleeding disorders like hemophilia. By fractionation and manufacturing technologies plasma gained a longer shelf-life and could be shipped more easily (Starr 1998). By today production and application of plasma are decoupled and the development of plasma-derived products is now the task of specialized organizations that made supply internationalized (non-profit and for-profit alike) (Kent and Meacham 2019, 86).

Voluntary, non-remunerated blood donors give whole blood, while paid plasma donors only give plasma which is separated from other blood components during donation by a special centrifuge in a plasmapheresis machine. However, plasma can also be derived from whole blood but it has to be used within a shorter time (Kent and Meacham 2019). Plasma is seen as a quasi-pharmaceutical product even in its raw form and as such more easily available for commodification. The bulk of global plasma is collected and exported by the United States (almost 70%) and most European countries rely on US supply (approximately 2% of US export is made up by plasma, Élő 2020). In this sense, it could be said that blood is national and plasma is global (Busby et al. 2014). Nonetheless, blood and plasma economies are intertwined, blood products cross national borders in import and export which complicates the meanings attached to them by donors and recipients and also their social, economic, or even political standing.

It is a general trend that blood demand increases in the Global North, even though these are the countries where over half of global blood donations occur. According to the 2014 report of WHO, by 2050 even in these countries, blood supply will be insufficient. In line with this tendency, most countries (113/156) already need to import plasma-derived products because a steady national plasma supply cannot be secured (Kent and Meacham 2019, 35). Hunger for plasma can have devastating consequences as it was seen during the plasma rush in rural China in the early 1990s (Shao and Scoggin 2009). Due to the uncontrolled mass recruitment of rural plasma donors, many Chinese citizens got infected with HIV.

In Hungary national blood donation is voluntary, non-remunerated, and operated by a nonprofit national blood service (OVSZ – Országos Vérellátó Szolgálat/Hungarian National Blood Transfusion Service). Plasma procurement occurs in Hungary in two ways. First, there is an internal market for 'collateral' plasma gathered during whole blood donation as cost recovery. OVSZ sells plasma for Hungarian and multinational pharmaceutical companies to produce plasma-derived blood products (under the EU-standard market price) (Élő 2019; Zsidai 2012).

Second, the Hungarian state imports a range of commercially produced plasma-derived products. However, the bulk of direct plasma donations are arranged through commercial plasma centers which are found in almost all bigger cities in the country (Budapest, Debrecen, Miskolc, Szeged, Kaposvár, Székesfehérvár, Győr). Currently, seven companies are present in the country (Vascular Plasma, Kedplasma, CSL Plasma, Sanaplasma, Plazmacentrum, Plazma Pont, Plazma Center). They directly supply to specific pharmaceutical companies (Bíró 2019). For example, Biotest AG imports processed plasma products back to Hungary for patients in the country (Bíró 2019). In Europe, Hungary has the most plasma centers (34) proportional to its population (Élő 2019). Since 2016 the government regulations oblige commercial plasma donors to give whole blood at least once a year to prevent "crowding out" from the voluntary, non-remunerated system. According to the relevant government decree, plasma donation cannot be paid, thus centers label payments as 'compensation' which is limited at approximately 4000 Ft (11 Euros). However, centers supplement this with various coupons (which can increase the sum up to 6000-8000 Ft). Hungary mostly provides "raw material" which is sold to multinational pharmaceutical companies (mostly based in Austria and Germany) that produce plasma-derived medical products from it (Élő 2019). Hungarian citizens living next to the Western border often travel to give plasma in Austria where they get a higher 'compensation' (Czeglédi 2017).

Plasma donors also need to be screened and tested. Centers only let applicants donate after their samples were tested for certain illnesses (HIV/AIDS, syphilis, Hepatitis B and C). Plasma is replaced faster than whole blood since it does not contain red blood cells, platelets, or white blood cells. It is a yellowish liquid containing mostly water and proteins. Donors in Hungary have to be between 18 and 60 years of age, and between 50-150 kg to be eligible. Applicants are advised against eating greasy food (because it affects the quality of the plasma) and are asked to drink at least 2 liters of water before donation. Similar to whole blood donation, people who got piercings or tattoos in the previous 6 months are discouraged from donating. At least 72 hours have to pass between donations, so the body can replace the lost plasma. According to the Hungarian

regulations, one person can only donate up to 45 times per year (in the US, 104 sessions per year are allowed) (plazmaadas.hu). However, commercial centers do not have an aggregated database in Hungary, so in theory, donors can cheat the 72-hour prohibition by going to a different center (Bíró 2019). Criteria of donor deferral are similar to that of whole blood donation and are regulated by national authorities (or the EU in the case of Hungary). Applicants can be deferred due to changed lifestyle or status (such as traveling to certain countries, illnesses, lifestyle, or behavior).

OVSZ is part of a scientific consortium established by the Hungarian government that seeks to produce a therapeutic plasma product from the blood of former COVID-19 patients. The therapy is based on using the immunoglobulins (antibodies) contained in plasma to provide passive immunization to patients with severe symptoms until an effective vaccine is developed and manufactured. With the help of the government, the consortium has launched a campaign to recruit former patients (even asymptomatic) to donate plasma (source: http://koronavirusplazma.hu/). Alongside state health care institutions, a commercial plasma center joined the initiative (Plazmaszolgálat Kft.). This new development can potentially (and temporarily) rearrange the gift/commodity dichotomy in which plasma donation is embedded.

Literature review

The discourse on blood donation in social sciences is mostly dominated by the gift/commodity dichotomy. The seminal work of Richard Titmuss (*The Gift Relationship*) shaped even national blood supply management ([1970] 1997). Exploring blood donation in the United Kingdom after WWII, he placed it in a national context and identified voluntary, non-remunerated blood donation as the most desirable, safest way of supply. In the Titmussian gift relationship formed by donation, donors are perceived as altruistic: through the act of giving they become part of a wider national community and obtain a special form of *biological citizenship* (Rose and Novas 2005). However, a growing body of literature is critical of Titmuss's theory of altruism and gift exchange. Patricia Mahon-Daly complicates the theory of whole blood donation when she connects the concepts of

risk and risk management to blood and replaces pure altruism with depositing, "giving blood to get back" and reconceptualizes blood donation as a covenant between individual and society, a form of conditional altruism rather than gift relationship (Mahon-Daly 2012). Moreover, she complicates the meaning of blood as an object of risk management, body part, (national) metaphor, pharmaco-medicinal substance (Mahon-Daly 2012, 10) – a multivalent symbol that is more ambiguous and diverse than Titmuss' *gift*. Contrary to Titmuss, Mahon-Daly and several other scholars consider how blood and donor deferral (based on risk) can be the basis of exclusion and not just inclusion in circuits of citizenship and community (donor-citizenship as Mahon-Daly refers to it). However, most analyses of these forms of exclusions still focus on the gift relationship (Strong 2009, Valentine 2005, Kent and Farrell 2014). This project aims at complicating this correlation of gift and plasma following the footsteps of Mahon-Daly among others.

Titmuss' book had a long-standing influence on academic discourse about blood donation until today, however, a different line of thought also emerged which is defined primarily by the idea of the commodification of blood and the critique of neoliberalism. Donors enter the global commodity chain by giving or selling their blood – scholars following this line doubt the altruistic intentions of donors and assume their potential exploitation. Shao and Scoggin draw attention to the dangers of this extensive commodification and the tendency to view bodies as sites of potentiality by analyzing the mass infection of rural Chinese commercial plasma donors with HIV (2009). Their study also draws attention to the intertwining of state and commercial interests in blood management and commerce which is a dominant theme in Hungarian plasma procurement and thus could be useful for my own research.

Not only commodification but also the process of biomedicalization make blood alienable from the donor's body (Mahon-Daly 2012, 14). Mahon-Daly points out that in anthropology blood was often regarded as a bond between humans, a sacred life-giving fluid and it is still seen as such in certain cultural settings (Copeman 2009, Schwarz 2009). However, in the Western context as

donation is transformed into a purely technical and medical process blood (at least certain forms of it) lost its magical, highly symbolic qualities (Mahon-Daly 2012, 43). Mahon-Daly also points out that in modern blood donation there is a mediated, indirect relationship between donors and recipients which further enables the alienation and deconstructs the idea of blood as gift (2012, 54). Vein-to-vein transfusion stopped being the main paradigm of donation, blood today is broken down into its components (red blood cells, platelets, plasma, etc.), used differently, and is given to several unknown patients. Blood can be imagined as a form of biocapital, a part of a more extensive global system of exchange (Scheper-Hughes 2002a). As blood is extracted from the body, it acquires additional value and certain bodies tend to have more "blood capital" (based on their age, gender, health, and blood type) (Mahon-Daly 2012, 80). In my research, I plan to explore not only commercialization but the changing of the gift relationship as well. I will focus on this extraction step which contributes to the shifting meanings between gift and commodity, and thus Mahon-Daly's approach can be useful for my research.

After fractionation blood becomes a quasi-medicine more than a body part, man-made, rather than natural. As Lock points out, market forces make blood donation particularly vulnerable to exploitation since blood is regarded as a renewable bodily resource and easy to donate which facilitates objectification and commodification (2001, 69). Copeman takes a step further by writing about the literalization of blood: people in need of cash can literally liquidate themselves in the market by selling their plasma (Copeman 2009, 5). This can be seen in Waldby's concept of *biovalue* which "is generated when the generative and transformative productivity of living entities can be instrumentalized in a way that makes them useful for human projects" (2000, 33). Julie Kent and Darren Meacham connect this with *biosecuritization* in which biological material is separated from its original context (donor body) after it is designated as a potential asset or a commodity. Subsequently, *bio-commodity* is created which moves through systems of exchange, sometimes structured as markets, sometimes not (2019, 31). Kent and Meacham argue that this itself does not lead directly to commodification, for them seeing the body as a whole and not as a set of functions

is essentialist. They argue that commodity is not one kind of thing but another phase in the life of some things. However, "blood's new life" (mostly as a commodity) begins when exiting the donor's body, thus compartmentalization is vital in turning blood into a commodity. It is technologically reformulated, divided into components that are manipulated into creating new products which in turn generate new forms of bio-value. Plasma (as a potential waste or loss of whole blood) is salvaged, compartmentalized by certain biomedical techniques that could be a first step toward creating bio-value and commodification. One of the aims of my research is to explore this possibility.

Some works try to find the middle ground between the two (or even more) perspectives. Simpson in his concept of haemato-global assemblage demonstrates how in the global system of blood collection and storage a wide variety of (local) donor intentions and interactions can be included and intertwined (2009). Works that regard these various perspectives consider that blood as a liquid human tissue is affected simultaneously by altruistic and economic forces and can be regarded as both gift and commodity. Waldby and Mitchell also point out that one or the other alone cannot help us explore contemporary blood economies since they are mostly characterized by the coexistence of gift and commodity (or welfare and market-based) forms of exchange (2006). Wittock et al. also emphasize how blood can mobilize different meanings at the same time (economic, risk management, gift) and these multifaceted aspects are often shaped and negotiated by institutional, biomedical practices that aim at processing and managing the collected blood (2019). Such approaches that consider the multiple understandings of blood (which then are applied to plasma) could be useful since they keep blood/plasma in its complexity – not solely understanding it as either gift or commodity.

Plasma donation is often discussed in the context of whole blood donation as a blood component, yet there is a paucity of studies focusing on the specificities of plasma donation. Plasma can be derived from whole blood by fractionation or extracted separately by plasmapheresis. Its unique

biological qualities enable it to become a commodity more easily: the extracted amount is replaced faster by the human body and its longer shelf-life (it can be used up to one year) and easy transportability enabled by newer biomedical technologies can render plasma a valuable commodity. In contemporary society, blood has more value outside of the body than inside, by pooling and reconstituting blood into its components it is demystified and its gift-like properties are reduced (Mahon-Daly 2012, 50). Plasma donation or extraction involves specific kinds of exploitative practices as well. In the US, several studies focused on how the financial incentive to donate contributes to the exploitation of marginalized, vulnerable groups like homeless people (Anderson and Snow 1995), IV drug users (Chitwood et al. 1991), the inner-city poor (Kretzmann 1992, Wiegand 1989) or university students to a lesser degree (Anderson, Newell and Kilcoyne 1999). In the Hungarian context mostly whole blood donation and donor intentions (Béla-Csovcsics and Kincsesné Vajda 2018) were studied, plasma donation and its specific practices, constellations of exploitation, and economic implications were neglected. Due to its special qualities and the lack of scholarly attention on it, I intend to handle plasma as separate from whole blood and focus exclusively on it in my research.

Most research on blood donation can be separated either into donor-oriented or blood-oriented perspectives. Many texts discuss the motivations behind donation, the exploitation of donors, or certain kinds of discrimination against them based on gender (Kent and Farrell 2014), sexual orientation (Valentine 2005, Strong 2009), race or ethnicity (Hobbs 2020). Fewer works focus on the global circulation of blood as raw material or commodity or its "new life" as a separate entity outside of the human body. In her analysis of UK whole blood donation, Mahon-Daly outlines what she calls a *hierarchy of the self* which can be helpful for my research in understanding donors' relation to their bodies. Her donor interviewees describe blood as residing at the bottom of this hierarchy: it is a less integral part of their body than organs, as renewable tissue it can be alienated from the self more easily (unlike Weiner's inalienable possessions – organs and even sperm, or breast milk are constituted more according to this model) (2012, 246). As separated from the blood

itself and renewed even faster, plasma can be seen even lower in this "hierarchy of the self". Obviously, this easier fragmentation and subsequent alienation are connected to the growing biomedicalization of the body itself. Thanks to the ever-advancing biomedical technologies, body parts can gain a separate existence from the whole human body and subsequently these technologies interact with the body parts separately. Blood and plasma are such separated, fragmented body parts, taken out of the whole anatomical system (and plasmapheresis proves that fragmentation and alienation can be progressive, blood can be broken to even more hardly recognizable, smaller components).

Moreover, donor bodies are placed under scrutiny before donation itself. As Strong claims, the scene of donation becomes a theatre of sexual surveillance where the donor has to enunciate the truth about themselves as sexual subjects (2009). Donor asceticism is also increasingly expected as risk management is shifted into the individual terrain (donors have to develop and maintain habits of self-control and self-surveillance in order to give blood or gain income from blood) (Copeman 2009, 9). The staff of donation centers often "disassemble" and scrutinize donor bodies by questionnaires, tests, inspection of veins, and connecting the donor's body with the needle and sack (or plasmapheresis machine). As Lynch and Cohn posit, these inspections gradually lead to the alienation of blood from the individual donor body and ease the extraction of bodily substances for further usage (2017). These conceptualizations of the bodily experiences of donors can help me examine plasma donations in which these alienating physical practices pave the way for the fragmentation of blood and its potential subsequent commodification. What is also important to consider is the eligibility or ineligibility of certain bodies. Cohen's concept of *bioavailability* can become a privilege or on its flipside, a stigma. Some people are "available for the selective disaggregation of their cells or tissues and their reincorporation into another's body" (2005, 83). Thus, some are in the position for participating in bioeconomies/tissue economies (Waldby and Mitchell 2006), while others are excluded from this possibility (in blood and plasma donation alike).

Rebecca Lynch and Simon Cohn break with the donor-oriented approach and follow a posthumanist approach. They argue that donated blood is 'made' only when it leaves the body and is depersonalized, reconstituted to have biomedical value (2017). The virtue of their approach is that they question and complicate the Titmussian gift relationship and the inherent symbolic, essentialist notions connected to blood as a substance. They highlight the institutional/biomedical processes that alter the materiality of blood which leads to its altered state as a commodity or as a medicine. By placing blood in their ethnographic focus, they shift attention from donor intentions which do not always explain the functioning of blood economies and take a closer look at smaller donor-staff interactions, operations, practices that are lost in wider (national or global) analyses focusing on neoliberal critiques of blood economies. Their model can help me trace the rich "new life of plasma" that the bodily substance gains after leaving the donor's body. However, I do not intend to completely ignore donor intentions or practices, since those constitute the integral, initial phase of the plasma network, and only by following donors, I can highlight the exploitative aspects embedded in this sector. By analyzing exclusively the "blood's journey", Lynch and Cohn make biomedical technologies that enable it seem "innocent", asocial and apolitical. By bringing back human interactions (and combining them with non-human ones) I intend to highlight the potentially exploitative or altruistic undercurrents of these seemingly neutral technologies.

To map out at least a segment of the Hungarian plasma economy it is necessary to consider both donors and plasma itself (as separate bodily material). Donor motivations, interactions of staff, and donors in plasma centers should be analyzed in connection with the route of plasma outside the human body (processing, treatment, distribution, and selling) within the framework of plasma companies. Donors and extracorporeal plasma constitute one "circulatory system" which connects individuals (from donors to patients receiving plasma-derived medicine), national networks (as plasma as blood component enters and exists national borders as raw material and processed medical products), and global blood systems (pharmaceutical companies extracting, buying plasma as raw material and processing and reselling it as medicine). Within the range of my research, it is

impossible to cover the whole "circulatory system", thus I limit my analysis to one specific center of a Hungary-based plasma company and only indicate plasma's journey to the channels of global bioeconomy.

Research Question and the Outline of Chapters

My main research question is 'How does the process of donation and the subsequent management contribute to shifts between the gift- and commodity-like understandings of human blood plasma?'

Gift- and commodity-like aspects can potentially stem from certain material qualities of the plasma itself, which are further complicated by the subsequent handling of it. These interventions change its material qualities so that plasma turns it into something artificial, rather than natural. It is worth investigating how it changes its understanding as either gift or commodity. I start my analysis of the shifts between altruism and commercialization from the close-up on blood plasma itself in chapter one. Plasma starts a 'new life' after leaving the donor's body. It goes through several different steps of procession (by chemical treatments to increase its shelf-life, making it portable, rendering it suitable for producing medicine, etc.) which alter its biological qualities until it is barely recognizable as 'human' anymore. Even after extraction (i.e. exiting the donor's body) it is often seen as quasi-medicine but procession, treatment makes it even more 'artificial'. In chapter one, I explore plasma's relation to whole blood and the similarities and differences between plasma and whole blood donation. Through the analysis of the material qualities of plasma and the technological environment of its donation, I explain how this tissue can shift between being gift or commodity (or a combination of both). Plasma does not become a gift or a commodity merely by material or biotechnological factors: it is human actors and social relations that attach meanings to it. As a segue into the exploration of social interactions around plasma, in the first chapter, I look into biological labor (that enables sustained plasma donation) and the risk connected to this tissue. These concepts combine non-human and human factors and lead to the analysis of the social interactions between key actors in the plasma center.

To explore the next layer of the interconnections between gift and commodity in plasma donation, I analyze how the process of donation evokes or suppresses notions about human blood plasma as gift or commodity (e.g. in donor-staff interactions, the interior design of plasma centers, interaction with the plasmapheresis machine). The bodily sensation, the routine of donation, and the process of entry, deferral, medical examinations further complicate the relationship between gift and commodity. In chapter two, I examine how the internal and external environment of plasma centers create, suppress, or highlight gift- or commodity-like associations about plasma. To show this, I analyze how the management of plasma centers regulates their employees (doctors and assistants) and how it frames the interactions between them and the donors. The social interactions within the plasma center render plasma either a gift or a commodity and plasma donation an act of altruism or commercial exchange. Thus, a crucial part of the analysis is the discussion of donor-staff interactions. In the second chapter, I briefly look into the relationship between plasma centers and the Hungarian state, since this ambivalent cooperation also complicates the gift/commodity connotations of plasma. Exploring the inner workings of the plasma center leads my analysis to the examination of the process of becoming a donor.

In the third chapter, I follow the process of becoming a donor. I guide through the components that contribute to being a donor. First, I analyze donors' relation to their bodies and their plasma, how their "gift" or "merchandise" can become an object of risk, how deferral can affect donor careers. Second, I look into how social and economic factors alter how one becomes a donor (if at all). Third, I explore how donors strive to influence the quality of their plasma by developing a habitus and what bodily sensations the donation itself evokes. The way the communication of the plasma center (e.g. through promotional materials) reinforces, alters, or clashes with their expectations of donors as "gift-givers" or "vendors" (e.g. their motivations, their ideas of what happens to their plasma after extraction) is also an important factor in "turning" plasma into gift or commodity. It is kept in the background throughout the third chapter as it leads to the last

section of the thesis which reveals the wider, institutional narratives in plasma centers that heavily influence whether plasma donation is deemed an act of altruism or commercial exchange.

Some aspects of their self-perception and ideas about donation are reinforced, altered, or contested by the institutional communication of plasma centers and their treatment as donors in the centers. Institutions can foster altruism or alternatively reinforce commercial factors - these do not originate exclusively from the individual motivations of donors. Hence, the last chapter is dedicated to the analysis of these institutional narratives and scripts. I reveal how plasma centers reconcile the seemingly contradictory messages of medicalization or demedicalization depending on which supports donor retention (and thus generating more profit) at a given instant of the donation process. Connected to this, it is explained how the narratives of altruism and commercialization are accommodated on an institutional level, to recruit and keep more donors. An additional, recent institutional development complicates the gift and/or commodity-like understanding of plasma even further. The state-coordinated COVID-19 plasma therapy initiative is supported and partially carried out by commercial plasma centers as well, while in its communication and in the usage of the extracted plasma we can see 'gift-like' components (koronavirusplazma.hu 2020, plazmaadas.hu). This development is not explored in detail in the thesis, but it is acknowledged as a factor that complicates the gift-commodity interrelation.

Methodology

In the research, I aimed to keep both non-human (blood/plasma itself, plasmapheresis machine, fragmentation) and human factors (donors, plasma center staff, workers in storage/processing centers and their interactions with each other and the plasma) in the focus since both contribute to the shifts between gift and commodity aspects. Certain changes in the material characteristics of plasma itself ignite these changes (e.g. separation of plasma from other blood components in plasmapheresis, chemical treatments in the plasma center for transportation and storage,

treatments in processing units to prepare the biological material for medicine-manufacturing), however, the intentions of donors, the interactions of staff with plasma, the communication of plasma centers and pharmaceutical companies and views of recipients/patients also influence these back and forth shifts in the understanding of plasma as gift or commodity.

To keep the research process manageable, I limited my investigation to one plasma center (out of the seven companies that are present in Hungary). I chose Plazmaszolgalat.Kft (affiliated with the German Biotest AG pharmaceutical company) that operates Plazma Pont centers. It seemed ideal because it exports plasma abroad for processing and sells plasma-derived medicines back to Hungary (so it is connected to the profit-oriented global circulation of plasma), but also participates in the state-governed COVID-19 plasma therapy initiative (which is tied to an altruistic project). I did not follow the full "flow" of plasma from the donors through processing units to recipients, I only focused on the interactions and practices within the center.

My research utilizes several methods that complement each other. Following the methodology of some previous research on the topic (Mahon-Daly 2012, Busby 2010), I conducted semi-structured interviews to find out what meanings certain actors attach to plasma. While interviewing British blood donors Helen Wynne Busby (2010, 373) uses a topic guide, not fixed questions since it better captures individual experience (i.e. what is done with the blood, views on payment for donation, concern about giving blood, giving blood for research instead of saving lives, how their experience as donors changed over time) and it helps to capture the individual concepts and meanings donors attach to the extraction of their plasma and its subsequent processing. I followed the same method while interviewing staff members, patients, and employees in the center. Some interviews were scheduled, others were less structured, and were improvised during the process of donation (plasmapheresis takes quite long and involves a lot of interaction between assistants and donors, thus it is ideal to initiate a conversation). For recruiting interviewees, I primarily used convenience sampling (i.e. reaching out to people I met during the donation or in the center). To complement

interviews, I conducted a short survey in a closed Facebook group for plasma donors (N=70). The questions included mostly concerned attitudes, previous experiences, and motivations towards the donation. I briefly analyzed the contents of the promotional materials of plasma centers (e.g. pamphlets recruiting donors, posters, videos, social media, etc.) for these materials also carried embedded notions of gift and commodity attached to plasma. However, the focus was not primarily on the media analysis.

Semi-structured interviews were complemented by participant observation (Mahon-Daly 2012, Lynch and Cohn 2017) conducted in the plasma center. It revealed details that were omitted or hidden in interviews (e.g. nuances in donor-staff interactions, interactions between employees, and raw/processed plasma) regarding the gift and commodity concepts of plasma. To gain access, I myself went through the process of becoming a regular donor. In this regard, I followed a mode of inquiry that Loïc Wacquant (2014) refers to as carnal sociology which deploys habitus as "both object and means of investigation". It not just considers the body as a socially constructed object but thrives to create social science from the body as a socially constructing vector of knowledge, power, and practice (Wacquant 2014, 119). My own body literally became a vessel of knowledge as I could observe the changes, challenges, and newly formed habitus derived from the experience of donation. I could also see how social interactions, the attitudes of other donors and staff changed towards me as I progressed from a newcomer to an experienced donor. Being a donor also provided me easier access to doctors, but also the higher levels of the management (e.g. the manager of the center, the head of marketing). This method also had its limitations: my fieldwork had to be restricted to one center, since switching between different branches or going to several competing centers as a donor is not allowed by the regulations.

The above-mentioned methods combined could enable the emergence of a grounded theory (Glaser and Strauss 1967) which is formulated by using the concepts of the interlocutors to inform/adjust the researcher's preconceptions. This helped to flesh out the salient themes in the

research, but evidently, it also limited it. The research was a very specific inquiry into a segment of the Hungarian plasma donation landscape and a limited circle of donor population, its findings cannot be generalized or adopted seamlessly to other national plasma donation systems.

Chapter 1: Precious Material – Gift- and Commodity-Like Characteristics in Plasma as Tissue

During my fieldwork, it quickly became clear that the materiality of plasma matters. Its quality, the abundance – or the meagerness – seemed to be a constant object of concern. The first time I sat in the donation chair, the assistant who was about to take my plasma asked me what I had for breakfast: whether it contained enough protein to boost the quality of my plasma, whether I drank enough so the donation would be less cumbersome. During later donations, it turned out that I have difficulty maintaining a steady protein level in my plasma which was undesirable for later medicine manufacture and was also potentially detrimental for my health. The doctor at the center kept asking about my diet, trying to give advice on how to consume more protein, drink enough water, not exercise before donation (since it decreases protein levels). It almost seemed as if I was constantly fighting with my own body to get it to produce the right kind of tissue. I was mesmerized by the flow of the golden-colored fluid as it was dripping into a bottle during donation – it felt like the fruit of my week-long work of right eating, drinking, and recovery. However, other donors I talked to and surveyed reported different degrees of difficulty with maintaining the "good quality" of their plasma - but it was clear that they all had a routine (diet, fluid intake, recovery), most of them cultivated some sort of habitus to be able to give plasma of satisfactory quality, as often as possible. Plasma as a substance was also important for the rest of the staff: they constantly monitored the process of plasmapheresis, the storage, and the transport away from the center. Its material qualities mattered in and outside of the body – it had to be monitored, analyzed, and improved for it to be beneficial (as a gift) and profitable (as a commodity).

In their article titled *Beyond the person,* Rebecca Lynch and Simon Cohn follow a posthumanist trail and focus on blood as an 'actor' which has a life of its own, something that changes and moves. This approach is also inspired by Bruno Latour's actor-network theory: blood as a non-human entity interacts with humans and from these encounters, new value and biomedical substances

emerge. In this chapter, I partly follow this posthumanist approach and focus on plasma as a meaningful participant in the system of plasma procurement and management, which as a substance (in and out of the body) undergoes metamorphoses and enables shifts in the system. It possesses and gains certain qualities that render it a special material worthy of discussion, even separately from donors and the staff that facilitate plasma donation. Plasma is a component of blood, yet it is managed quite differently. While blood has altruistic notions attached to it, plasma became a commodity in the Hungarian procurement system (and in other European countries, like Germany, Austria, and the Czech Republic). Certain material qualities potentially render plasma a commodity more easily, thus it is worth examining and comparing this tissue with whole blood to identify the material characteristics that help explain their differing treatment and connotations attached to each. To do this, it is helpful to offer a short overview of the literature discussing the material qualities of whole blood and then explore its connections, similarities, and divergence from blood plasma. Additionally, the biomedical technologies and the process of donation itself contribute to the commercialization as well as the "gift" aspects of plasma. As plasma is a "derivative" of whole blood, in my discussion I will "derive" the analysis of plasma as material from the previous analysis of whole blood.

Blood is described as a multivalent symbol by Patricia Mahon-Daly (2012, 10). It can be a body part, a metaphor, and a pharmaco-medicinal substance. Blood donation in the West has lost its ceremonious, elevated tinge that Titmuss described after World War II. It is technical and mostly stripped of its symbolic layers (some of them remained in the narrative but less in the act itself). The same can be said about plasma donation. Mahon-Daly analyzes blood, but her findings can easily be adapted to the study of blood plasma as well. As she states, there exists a link between the process of biomedicalization of the body (which renders the totality of the body a collection of separate parts) and the creation of a self-ascribed 'hierarchy of the self'. Meaning that certain human body parts and tissues – more than others – can become more alienable from the wholeness of the self (Mahon-Daly 2021, 14). However, not only the body is disassembled, blood itself is

going through this process of disintegration. In contemporary society, blood has more value when out of the body than inside. Bodies have differing degrees of blood capital (based on age, health, blood type, gender, etc.) (Mahon-Daly 2012, 78) or bio-value that is 'generated wherever the generative and transformative productivity of living entities can be instrumentalized along lines which make them useful for human projects' (Waldby 2000, 33). Some bodies are thought to carry more cherished blood substance, while others potentially carry risk and contamination even though, medically speaking, their blood/plasma is the same.

Pooling the 'gifts' of several donors together and fractionating blood to its components until it is not recognizable as blood (or even human) anymore demystifies the tissue (Coleman 2004, 342). Lynch and Cohn state that blood is not a special kind of substance but when donated it is transformed as it moves through time and space (through exchange systems, from donor to recipient, through pharmaceutical factories where its material qualities are altered), it can have cultural and medical meaning alike which is not stable or singular (2017, 363). It shares similarities with Marx's notion of 'commodity fetishism' (1990) as well: blood as a substance seems to hold some intrinsic, mysterious qualities which seemingly derive from its materiality. However, just as in the case of other commodities, its 'value' is generated by the additional medical, technical processes and labor that render it a commodity, and the social interactions that weave exchange systems around it. Techniques and methods of biosecuritization ensure that bio-value (Waldby 2000) is isolated from possible contamination, waste, and other forms of loss (Kent and Meacham 2019, 31). It also entails the separation of 'valuable' biomaterial from the donor body. To bring this further, if blood can exit the body and obtain more value as a quasi-medicinal substance, then it can circulate outside the body, enter a bigger global exchange system and turn into a bio-capital (Copeman 2005, 468). Lynch and Cohn reveal a series of divisions – bodies from persons, blood from bodies, separations of blood itself – that alter blood as a substance. In this process, it is revealed that blood is never a singular/essential substance, but a composite that can be further divided and augmented to produce new biomedical value (2017, 365). It is undergoing constant

transformation, from the donation process, through the manufacturing of blood products (such as red blood cells, plasma, platelets, plasma-derived medicines), and from this continuous transformation new bio-value is born.

1.1 Material Markers of Commodity and Gift

Plasma is not inherently a commodity – it needs to be "turned into" one by human intervention. But undeniably, certain characteristics enable its commercialization. It replenishes faster than regular blood, can become a commodity more easily since it consists of water (about 95%) and dissolved proteins (like serum, albumins, globulins, fibrinogen). Frozen plasma can be stored for much longer periods than whole blood and thus it is easier to transport. While studying blood donation, Mahon-Daly introduces the concept of the 'hierarchy of the self' which describes how certain tissues and body parts are imagined as integral parts of the self. Blood resides at the bottom since it is reproduced fast and is easy to extract. Mahon-Daly differentiates between liquid (such as sperm, breast milk, blood) and solid parts (such as organs or bone marrow), which are harder to 'give away' (2012, 244). Plasma can be placed even lower than blood in this hierarchy. It does not contain the so-called formed or cellular elements of blood (red and white blood cells and platelets), thus it cannot be connected to the individual as whole blood can be. Unlike whole blood which cannot be mixed because it has different types that are not compatible with each other, plasma can be pooled together because it lacks specific individual markers. As Copeman (2005) argues, high 'identifiability' of blood can equate to safety. If blood is individuated it can be screened more easily and its purity can be ensured. Hence, pooled plasma with its lost origins can be a source of anxiety (472). It can indeed include different hormones, different levels of proteins, or even pathogens (which are filtered out) but during the manufacturing process, the material is broken down into parts and chemically treated so it loses all its human specificity. This homogenization is crucial for quality assurance, so all plasma-derived medicine becomes the same commodity (although donors start a sort of initial homogenization procedure by following dietary,

health, and lifestyle advice given by doctors, so their product is made more or less similar already in their bodies). Margaret Lock points out that capitalist mechanisms can make blood donation especially vulnerable to exploitation because it is presented as a renewable biological resource and seems easy to donate (easier than whole organs or bone marrow for example) (2011, 69). Copeman warns that exteriorized blood (blood outside the body) can overwrite the usual symbolic kinship relations associated with the tissue. While writing about paid plasma donation in China, he points out that the exchange makes Marx's metaphor in *Capital* literal as poor workers and farmers 'liquidate' themselves in the market: "the vampire thirst for the living blood of labour" (Copeman 2009, 5).

Despite possessing clear commodity traits, certain characteristics make plasma suitable for altruistic purposes as well. Rhonda Shaw (2008) claims that altruism is not a universal phenomenon; people's perceptions of body gifting and donation depend on the kind of tissue being donated and to whom it is donated (42). Plasma is used to produce medicinal products which is emphasized by plasma centers. Certain recognizable, specific disorders are treated with plasma-derived products – the PR of plasma centers strongly emphasizes the connection between donors and recipients living with these specific, identifiable disorders. Since medicine production can seem quite technical and specialized for laypeople, the Plazma Pont center displays the bottles of medicines that are produced from plasma in a glass cabinet, hence the material connection between bodily tissue and processed product can be made in donors' minds. Plasma and its valuable components (like immunoglobulins, clotting factors, antibodies) can only be "produced" by the human body that increases its "moral" value. It is given to other human beings – in a processed form – as a kind of gift.

Paradoxically, the easy mode of procurement and the fast replenishing makes plasma an ideal commodity but an easily given gift as well: it is relatively low effort and painless to harvest. Additionally, it is quite anonymous since it does not contain cellular elements, thus it is easier to

handle it separately from the body and give it away to others. Kate Cregan points out that blood can be seen as a collective social fluid that is harvested, stored, and pooled for further redistribution (2006, 93). For some patients, this theoretical statement is not figurative, and their lives are literally dependent on blood (or plasma) as a 'collective social fluid'. In Hungary, the patients' rights advocacy work for hemophiliacs has a long history, and a specific group, Friend Group of Hemophiliacs/Hemofíliások Baráti Köre was heavily involved in shaping the Hungarian plasma donation system as it is today. The competitive, profit-oriented plasma procurement scene set up in Hungary was intended to supply Hungarian hemophiliacs with a steady dose of clotting factor products that help manage their condition (Csuja 2020, personal communication). László Csuja, the director of the Friend Group of Hemophiliacs/Hemofíliások Baráti Köre helped establishing this system. For decades he has passionately argued that for Hungarian hemophiliacs a certain reliable depot of plasma (which ideally comes from a regularly checked and monitored, stable donor pool) is an asset, a guarantee for their lives, and a much-needed gift. Csuja is relentless in his advocacy work to this day and the following quote from him appears on the website of Vascular Plasma: "If the supportive need ceases in people to help the life of another, then our patient group will go extinct". Hungarian plasma donors possess a sort of bio-asset which needs to be refined and processed further to be turned into medicine (and a commodity) by a profit-oriented pharmaceutical company that sells the plasma-derived medicine back to the Hungarian state. Csuja does not hide the cold, bare details of the negotiation process, the way his patient rights' group struggled for forcing down the price of the life-saving clotting factor products. For his group of hemophiliacs, these substances are gifts as well as products; they are well aware of the human source and the process of donation (which can occasionally involve altruism) but they also see the commercial, capitalist mechanisms behind producing medicine from raw plasma.

1.2 Boons of the Body - Biological Product vs. Biological Labor

In plasma centers, the employees who work in the storage rooms carry several plasma-filled bottles in a plate-like carrier – as if they were carrying coffee-to-go for their colleagues in the office. In the bottles, plasma indeed looks like a product: neatly, uniformly packaged, ready to pour, ready to use. Nobody could tell it came from people. People who organized their eating, drinking, and rest in a way that ensured the "good" quality of the liquid and sat for almost an hour, waiting for it to slowly drip into the bottle.

When discussing plasma donation, it is important to differentiate between *biological products and labor*. It is crucial to determine whether the body "automatically" produces certain materials and tissues [sperm, plasma, blood] or production/harvesting needs effort [bone marrow, eggs, organs]). This distinction may appear trivial, but it accentuates or suppresses gift- and commodity-like connotations and management. The product/labor contrast is connected to the difference between *regenerative* [blood, sperm, plasma] vs. *non-regenerative tissues* [eggs, organs] tissues. Plasma seems like an easy case since it is produced by the body automatically and is regenerative. Apparently, it has nothing to do with biological labor. However, biopolitics is messier than this. The biopolitical is a composite mixture of heterogeneous, conflicting forces, discourses, institutions, laws, practices that are embedded in and animated by material social relations (Bird and Lynch 2019, 301). Bird and Lynch introduce the term biopolitical economy, for they argue that today life itself has become a capitalist resource, *biocapital*. Biological matter has turned into economic matter. From the microbiological DNA, cells, genetically modified organisms to the macrobiological, like farmed animals, pets, plants, human slaves, and even the outer atmosphere, the inner core of the planet, the sea, and the land. In this biopolitical economy, a new form of labor emerged, biological labor which can be productive and reproductive as well. It is subjected to economic evaluation, appropriated, exploited, and usually undervalued – it is a form of life that has been thoroughly biologized, economized, and thus de-politicized (Bird and Lynch 2019, 311).

Marx and Foucault partially probed into this topic, but Antonio Negri synthesized their insights: under the modern conditions of capitalist production there is an extractive relationship to life as workers became valued as commodities for the sake of biological labor performed by them (Short 2020). US Food and Drug Administration defines plasma as a biological product (under the group of blood and blood components). Biological products include vaccines, somatic cells, gene therapy, tissues, and recombinant therapeutic proteins as well that are isolated from natural sources like humans, animals, and microorganisms. They are not chemically synthesized and their structure is often complex and not easily identified (FDA 2018). However, following Alana Cattapan, I regard plasma donation as a form of labor, rather than a medical intervention. While examining egg donors, she argues that the process of donation is a form of production with time, effort and risk involved. They are often seen as secondary actors compared to recipients and the altruism logic erases their contribution. They partake in an industry where most actors benefit more than them (doctors, pharmaceutical companies, lawyers, etc.) while they are the ones taking the most risk but benefit less financially (2016, 242-244). The same can be claimed about plasma donors, however, their contribution definitely entails less effort and risk than egg donors. Additionally, Waldby and Cooper argue that clinical labor (participating in clinical trials and testing) is not recognized as labor since subjects only give access to the productivity of their in vivo biology – however, their living tissues and reproductive processes still perform biological labor. These seemingly minor, unacknowledged reproductive processes are encompassed in the neoliberal restructuring of capital which opens up new reserves of surplus labor power and also a surplus of reproductivity (Waldby and Cooper 2008, 60).

Due to the technical characteristics of plasmapheresis, blood cells get separated from plasma, hence the constant, biovalue-generating transformation/processing mentioned by Lynch and Cohn starts upon donation already. The straw yellow material already seems less mystical than whole blood, for it lacks the idiosyncratic crimson color that carries many associations of kinship, race, and social collective. The quality of plasma can be influenced by donors themselves by

cultivating a *habitus*, eating habits (protein-rich food), increased fluid intake, exercise, healthy sleeping schedule. In a sense, donors become vendors/entrepreneurs who strive to improve the value of their product – this contributes to the *biological labor* they perform. While discussing the Chinese plasma market, Shao and Scoggin point out that poor plasma donors who lack any other capital endowment can participate in an entrepreneurial economy and can dispose of their bio-assets rationally. It can be understood as a fusion of Marx's and Foucault's concepts as Antonio Negri synthesizes them – life itself is turned into labor and bio-value supplementing and even substituting traditional and more abstract forms of labor (2009, 31). It should be noted that donors themselves have differing views about the labor aspect and effort invested in donation. "It's exciting but because of the preparations, it is a bit of a hassle". "It's well-paid and low effort…other than the [increased] drinking it wasn't burdensome" – says one of the young donors. A regularly donating couple does not share Negri's somber look on the labor aspect of plasma donation either: for them, the most difficult part was giving up alcohol consumption on the day before donation. However, if someone becomes a regular donor the cultivated habitus does not end with the donation, their lives become a loop of care and aftercare (hydrating, protein intake before and after, taking care of the puncture wound). Their habitus is an assortment of dietary, health, sexual and social choices. As a future investment, the center also helps with the biological labor: they give out protein powder and bars and cookbooks including protein-rich recipes as gifts to boost plasma quality. It became even more emphatic during the COVID-19 pandemic as donors had to take extra care not to get sick to be able to give plasma. However, "contaminated" plasma - which is rich in antibodies against the coronavirus - has become a precious resource, a gift for convalescent plasma therapy for severely ill patients. As a general rule, plasma should not contain antibodies for specific diseases, it should be more or less devoid of individual markers for easing further processing. In this case, the individuality provided by the previous COVID-19 infection is explicitly required (it should be noted that convalescent plasma is used differently than the material

collected for producing plasma-derived medicinal products, it is not processed and separated further but used directly and as a whole).

1.3 Dangerous Offering - Plasma as Source of Risk and Pollution

Whether plasma is regarded as a potential carrier of risk and pollution can decrease its value as a gift and a commodity. If "contaminated" or harvested from the "wrong" person, plasma can turn into a threat, rather than a gift for recipients and its quality as a commodity can decline. Hence plasma donation (stretching from the breakfast consumed by the donor to the maintenance of the right temperature in the room where the harvested stuff is stored) can be regarded as a constant struggle for quality assurance and safety.

Blood and plasma as substances seem quite apolitical. From a hematologist's perspective, when categorized and tested, these substances easily become de-cultured and de-socialized, subject of technical competence and health regulations, devoid of markers of ethnicity, gender, and religion. Kent and Farrell warn against this logic, blood and tissue economies (Waldby and Mitchell 2006; Rose 2006) can be gendered as manufacturing regulations and donation policies often discriminate against women (2014). Plasma donation policies carry such limitations as well: women are discouraged from donation during pregnancy, and breastfeeding and they are advised against donating while being on their periods. However, women can give plasma as many times (45 occasions per year) as men, which is not the case in whole blood donation. Even though blood plasma as a material is presented as devoid of any social markers by the medical staff, its assumed quality is implicitly intertwined with class and ethnic layers. These sensitive topics were curiously avoided and addressed at the same time in the interviews with the participants of plasma donation. As the class and ethnic markers of donors kept returning in a roundabout manner, I decided to discuss them in chapter three.

Mahon-Daly points out that blood has become a symbol of risk society. It can potentially carry risk and pollution if contaminated or infected – it is not solely a source of purity and altruism as Titmuss portrayed (2012, 63). She follows Mary Douglas in explaining that that blood can be part of social order (if pure) and disorder (if impure). If blood is 'in place', it is safe and manageable, but blood 'out of place' (such as menstruation, bleeding from a wound) is pollution, dirt (2012, 53). Since potential donors (in whole blood and plasma donation) can be deferred due to suspected risk (lifestyle, behavior, traveling, illness), blood donation can be a basis of stigmatization (of certain groups, such as sex workers, gay or bisexual men, IV drug users, homeless people) not only inclusion or belonging in the 'body of nation' as Titmuss described (Valentine 2005; Kent and Farrell 2015). In the same way in plasma donation, the plasma of these groups is labeled 'impure', a carrier of risk that does not hold the potentiality of bio-asset or bio-capital. As Kent and Meacham (2019) explain, sorting waste/contamination from bio-value is connected to Roberto Esposito's idea of *immunitas* and immunitary politics in which the mitigation of health and other biological risks to individuals and populations are managed by the regulation of certain boundaries (30). According to this, certain groups cannot enter the morally binding gift relationship of the community because their contribution poses danger to it. This is the other side of the 'blood as a gift' coin. Deferral is not completely disconnected from what Mauss describes as 'losing face' when a gift is refused or is insufficient – not even in the financially compensated process of plasma donation. After being temporarily deferred due to low protein levels, I experienced this type of shame. The handling of deferral is a crucial issue in plasma donation, but it carries different associations than in whole blood donation due to the financial incentive – it is not solely a 'refused gift', but a loss of reliable income as well. This will be discussed further in chapter three.

The intertwining of altruistic and commercial connotations can be identified already in the materiality of plasma. If we take a step further away from the close examination of the tissue itself, similar interconnections can be observed within the peculiar social interactions between the actors

of the plasma center. Donors sometimes are presented and present themselves as gift-givers or vendors, doctors as quality controllers or moral guardians of gift-giving, assistants as facilitators of a commercial interaction, or enablers of the giving of the "gift of life". These different conceptualizations occasionally lead to tensions between the actors and make the disentangling of the threads of gift and commodity challenging. However, the coming chapters attempt to untie the knots of altruism and commercialization on the different levels of plasma donation.

Chapter 2: Offering and Selling in a Plasma Center - Key Actors in Plasma Donation and Their Balancing of Altruism and Commercialization

Just by taking a close look at plasma as material, we could see that some of its qualities enable both potentially altruistic and commercial treatment. However, it is the social interactions and institutional structures around blood plasma that shift the meanings between gift and/or commodity or create an amalgam of both. Hence, it is crucial to examine the plasma center as a social space where actors with specific interests and motivations interact with each other and contribute to either altruistic or commercial factors. Since plasma donation is a complex process with many levels, actors and often opposing interests, it is necessary to disentangle and identify the different components and isolate the commercial and altruistic aspects – which create tensions while keeping the donation, processing, selling, and ultimate usage of plasma (and plasma-derived products) as a system in motion. The length of the thesis does not allow me to explore all these stages (the complete flow of plasma), therefore I focus mostly on the practice of donation. However, the other levels (processing, selling, usage) must be kept in mind in the background, since they inform and influence donation itself. It is important to note that many of these connections, tensions, and circumstances are specific to the Hungarian system of plasma donation (e.g. competition of numerous centers, patients' rights advocacy, state regulations).

The key actors in plasma donation can mostly be found in the plasma centers: the doctors who examine donors, the donors themselves, the assistants who facilitate the donation itself, and the employees who handle the plasma (storage, analysis, transportation, etc.). As in whole blood donation, recipients/patients should also be considered (even if there are not present during donation) because their needs/interests inform the process of plasmapheresis itself. As it was discussed in the previous chapter, plasma as material plays a kind of "actant" role: donors are in tension with their own bodies, striving to produce "good quality" plasma to be able to earn money (or in rare cases, being able to offer a satisfactory gift that can heal others). Doctors are striving to

keep plasma quality high: give dietary advice, exclude donors who for some reason cannot produce good plasma. Assistants monitor the donation process to extract quality plasma from veins and store the plasma in a way that preserves its quality (i.e. proper refrigeration, running tests, etc.). Plasma as material defines, alters the behavior of participants and generates tensions and intertwining between altruistic and commercial factors.

2.1 The Clash of Experts and Businessmen - Doctors vs. Leadership of Centers

A certain tension exists between doctors and the leadership of the center which can be more generally described as a tension between a scientific and a commercial approach – which indirectly informs the overall gift-commodity interconnections within plasma donation. As it was outlined in the introduction, these facilities are subsidiaries of multinational pharmaceutical companies. Even though doctors aim to decrease the frequency of donations (although the ability to donate good quality plasma depends on individual physical traits and adequate habits), the center as a commercial enterprise encourages donors to give more often. With different campaigns, bonuses they aim to attract them, sometimes more often than once a week which is the recommended frequency (which is entirely against the advice of doctors). Within the framework of a so-called mentoring program, Plazmaszolgálat also encourages regular donors to recruit their family members and friends as donors – after each new client, the 'mentor' receives additional financial compensation. This strategy aims to reinforce the 'word of mouth' promotion which is one of the most effective recruiting tools of the centers. Although it might seem logical to emphasize the purely financial advantages to the donors, the narrative of the PR team highlights the communal aspects and the altruism involved in donation (calling donors 'plasma givers' [plazmaadó] contributes to this). As a further method, they aim to demedicalize the process with the interior design, colorful uniforms of employees, understating potential risks, side effects. These 'demedicalization' strategies will be analyzed in more detail in chapter four.

The above-mentioned narratives are perpetuated in the strong social media activity of Plazma Pont centers: the company is present on Facebook, Instagram, TikTok, Youtube and has its own app (based on the brief comparative social media survey I conducted, they seem to be the most active on social media among the seven competing companies in Hungary). The head of marketing emphasizes that the plasma center provides a service but also pays the client – thus commercialization is built into another level of plasma donation. They provide a service to the donor (the experience/act of plasma procurement), but in this special case, the client is paid as well. Additionally, Plazma Pont has their parent company (Biotest AG) as a client that buys the product (fresh frozen plasma), and indirectly they cater to the patients who use plasma-derived medicines. As he explains, ideally every donor should come once a week, since, with more frequent donations plasma quality decreases, the donor gets tired. He also adds that plasma procurement itself is less profitable, profit is more concentrated in the pharmaceutical company that is affiliated with the plasma center – income is generated when raw plasma is processed and value is added during the manufacturing of the medicines. The further commercial transactions following the donation are not exactly hidden from donors, but they are not emphasized either in the communication of the plasma center. When I ask about the future of my harvested plasma while sitting in the donation chair, the assistants seem to have an answer ready, but they remark that other donors do not pose such questions very often.

While doctors try to stress the medical aspects of it to raise awareness and convince donors to give responsibly and pay attention to their individual limits (and potentially not to endanger recipients). All the doctors I talked to emphasized that campaigns increase the flow of donors. Ideally, doctors suggest donation once a week, however marketing campaigns often encourage donors to come twice a week (e.g. hitting a certain number of donations in a month to win a prize/gift which cannot be achieved by coming only once a week). There is a natural daily, weekly, monthly, and yearly ebb and flow as both doctors and marketing personnel claim. Mornings and evenings, Mondays and Fridays, end of the month, the Christmas period are always more frequented.

Doctors mostly see the risks of more frequent donations, when they temporarily or permanently defer someone, "questions will come [from the leadership], who was deferred for what, why we sent them away". As one of the doctors explains, sometimes the marketing department calls or emails deferred donors to lure them back, for they have their contacts in their database but are not aware of the reason for their deferral.

2.2 Statal Altruism vs. Corporate Greed?

All Hungarian plasma donors are required by the state to give whole blood at least once a year. However, they do not always receive a warm welcome from the staff of the state-funded OVSZ (Hungarian National Blood Transfusion Service). While fulfilling my yearly blood donation requirement, the lady who was about to draw my blood gave me a disapproving look once her trained eyes identified the unusually big scar caused by the thick plasma donation needle. She told me that she did not understand why plasma donors would not give blood instead when there is a pressing shortage of blood stocks in Hungary. Apparently, there is disapproval from some employees of the blood donation centers towards the privately-owned plasma centers. After all, the Hungarian state coordinates whole blood donation which is based on altruistic ideals, while plasma centers appear to be driven by purely commercial interests. Relatively few national legislative systems allow private, paid plasma procurement in Europe (Spain, France, United Kingdom, Czech Republic, Germany, Austria, Hungary, Italy) but it is done in "industrial proportions" only in Hungary, Austria, and Germany (personal communication 2020). One of the main sources of tension is that in 2017 the Hungarian government introduced a new regulation that decreased financial compensation for donors from approximately 10 000 Ft (27,50 Euros) per occasion to 3665 Ft (10,08 Euros). The number of yearly donations was also maximized in 45 occasions. However, centers and donors find ways to treat these regulations flexibly: coupons, gifts supplement cash compensation and donors switch plasma center branches when they completed the 45 donations in one place. Additionally, the regulation obliged all plasma donors to

give whole blood once a year as well. This arrangement forced profit-oriented plasma centers to cooperate with state-funded OVSZ (Hungarian National Blood Transfusion Service) which became a supervisory authority and it bore new tensions.

In the past, plasma stocks were secured by OVSZ, derived from whole blood. These stocks were kept within the borders, but later on, some of them were sold abroad. While plasma centers - or to be more precise, the pharmaceutical companies they are affiliated to - take plasma outside of Hungary and then sell plasma-derived medicine back to the state. Negotiations of these business conditions were arranged with the participation of a Hungarian hemophiliac patients' rights group (Hemofíliások Baráti Köre/Friend Group of Hemophiliacs) that was lobbying for the introduction of several competing, for-profit plasma centers in Hungary to secure a safe, steady supply of medicines for Hungarian hemophiliacs (Csuja 2020, personal communication). OVSZ is also afraid of the "crowding out" effect of plasma donation – that non-remunerated blood donors switch in favor of the compensated plasma giving. The head of marketing of Plazmaszolgálat describes an opposite effect. According to him, when mandatory blood donation was introduced former blood donors who were said to be converted into plasma donors and "crowded out" of the system, did not start to give blood again, but numerous plasma donors that have never given blood before became yearly donors. According to this logic, plasma centers indirectly contribute to the much-lauded altruistic ideals of blood donation. It was not blood donors who usually give plasma anyway and the two do not exclude each other since blood can be donated more rarely (in every 3-4 months).

According to the head of PR, some of their donors even stopped giving plasma because they do not want to participate in mandatory blood donation since it exhausts their bodies more. However, he claims that Plazmaszolgálat has a good working relationship with the Hungarian Red Cross (which is also involved in whole blood procurement) since it is a "youthful, creative organization with similar visions". According to him, the state-funded convalescent plasma procurement

campaign which started during the COVID-19 pandemic also brought OVSZ and Plazmaszolgálat closer to each other. The project was a good opportunity for the company to display a sort of "institutional altruism". One of the doctors has a different view, according to her at the OVSZ plasma donors are rather discouraged from plasma donation by emphasizing risks and adverse effects. One donor was told that "they had low hemoglobin levels because they gave too much plasma". The doctor points out that during plasma donation all red blood cells are given back, thus hemoglobin levels cannot drop – it is flawed medical reasoning. As a regular plasma donor, I experienced the same disapproval. Upon seeing my relatively fresh scar at the mandatory blood donation, the assistant turned her nose and scolded me for not choosing regular blood donation instead when blood stocks are so low. The scar is easy to spot, especially by phlebotomists, because the needle used for plasma donations is thicker and leaves a bigger scar. In sum, disapproval can be experienced in the personal interactions with the employees of the state blood donation centers. However, on an institutional level, there seems to be a smooth working relationship, since OVSZ is the supervisory authority of commercial plasma centers and the shared state project of collecting convalescent plasma brought the two entities together in an altruistic project.

2.3 Many Happy Returns – The Relationships Between Assistants and Donors

Despite the above-mentioned sources of tensions, plasma centers operate through (mostly) harmonious interactions on the level of the staff (receptionists and assistants) and donors which contributes to the building of a strong, reliable recurring donor base. Upon entering the Plazma Pont Corvin center - where I conducted my fieldwork - one is struck by the friendly atmosphere which is nothing like that of a hospital or a doctor's office. Donors are chatting at the reception and are having light-hearted discussions with the assistants who are collecting their plasma. It almost seems like regulars having a friendly exchange in their favorite shop or bar. These interactions have a dual effect: they contribute to retaining donors and encouraging them to donate more often (and thus generate more profit), but also reinforce the feeling of community and

altruism. Besides performing the strictly medical operation of plasmapheresis, assistants make donors feel welcome and personally express gratitude to them for donating.

As it will be discussed later in chapter four, assistants who perform the concrete task of plasma procurement and venipuncture come from medical and semi-medical backgrounds (nurses, paramedics, dialysis, and nursing home staff). The donors have the most interactions with them, hence they need to be able to handle conflicts, anxieties, small medical issues (such as fainting, dizziness, etc.). According to their accounts, plasma centers are calmer, it is a way to avoid burnout which often occurs in the state health care system. Also, plasma procurement is less responsibility. "It's chiller, there are no sick people, you know that takes a lot out of you" – says a former obstetrician turned pheresis room assistant. They are also responsible for creating a friendly, familiar environment where donors willingly return to. One of my donor interviewees, who regularly donated with his partner in the past says the following: "for us, it matters a lot how people are. In the center they were nice, you could chat with them. You felt like you knew them". In the survey, several respondents highlighted the connection between donor wellbeing and the performance/attitude of the assistants: "A lot depends on the assistants of the pheresis room. How you feel in there. If everything goes smoothly and the puncture is right, it feels pretty neutral". "Where I go is very homely, although I have a needle phobia". "It is not painful at all, the puncture is not painful either, it depends on how experienced is the one putting in the needle".

The manager of the Corvin Plazma Pont center and the head of marketing describes familiarity as the key to retaining donors and creating a welcoming atmosphere in the centers. The aim is to build a stable, tested donor community with recurring 'regulars': "it's not good business for us if someone comes in and donates plasma 1-2 times and then drops out". "You always get the same. It's like a hairdresser's salon, you don't go somewhere else if it was good one time". Donors receive free coffee, drinks, sandwiches, and chocolate as well as occasional small gifts that eliminate the more unpleasant aspects of plasma donation and motivates them to come back. Plazma Pont

centers usually celebrate certain occasions (birthday of the center, World Health Day, World Blood Donor Day, etc.), where small gifts are given to the donors. The head of marketing refers to the initial testing and medical examination of donors as an 'investment' that does not produce a return if donors drop out. It could be seen in the way the staff dealt with my occasional dizziness and fainting. At first, they implied that I could be deferred permanently if it happens too often but when I fainted after my tenth donation, they handled it as an 'exceptional occurrence'. They seemed to be motivated to keep me as a reliable, tested donor they had already invested in.

"Our colleagues feel the best if they see faces that they already know…they meet them 50 times a year, they meet them more than their friends". Both of them fondly recall the bonds formed between recurring donors and assistants, they both mention how love affairs and marriages bloomed, one donor that asked an assistant to marry him in the pheresis room (a photo was published on the official Instagram of the Plazma Pont centers). Assistants are indeed friendlier and chat more to recurring donors – as I became a regular, I could experience this and could use it to gather more information. Donors and staff seem to develop a sort of joking relationship (Radcliffe-Brown 1940), they engage in banter and share medical information that would be considered sensitive in other contexts. It is similar to the weak, peripheral social relations of regulars and staff in a bar/café that were interrupted by the pandemic. Some of the receptionists and assistants expressed that they were happy they could nurture these connections because the center was allowed to keep open during the lockdown as a 'vital service'. However, not all interactions are welcome from the donors. One of the assistants admits that male donors sometimes flirt with her and ask for little favors, so she needs to pay attention to them. One of them constantly complained about small things during pheresis and asked her to even scratch his hand because he could not move from the cannula. Some of them also complain about fussy donors who keep complaining about everything during the process. Assistants are not only expected to perform medical tasks, a major part of their job concerns the management of donor

interactions. This balancing points to the blurring of medical and service aspects in plasma centers in general.

Plasma centers strive to keep a fine balance between emphasizing altruistic qualities and being as profitable as possible. Sometimes the two aspects work in tandem, reinforcing each other (i.e. when assistants make donors feel good about themselves, so they return and donate more often), sometimes an external actor puts pressure on centers to reinforce altruism (i.e. when plasma donors are obliged to give whole blood as well) and on other occasions an internal pressure pushes certain actors to serve the commercial purpose (i.e. when the management prompts doctors to allow more frequent donations). However, the most intricate and crucial exchanges occur between the medical staff and the donors – their relationship is also permeated by the shifting ideas of gift and commodity. It is not the usual rapport of a doctor and a patient either: plasma donors as generally healthy individuals usually present themselves more assertively, in an almost entrepreneurial fashion, while doctors carry out a "quality controller" role but at the same time trying to keep both donors and recipients safe. The next chapter unfolds how donors fashion themselves as quasi-vendors in a patient-doctor interaction and explores the overall "journey" of the donor in the plasma donation system.

Chapter 3: Becoming a Gift-Giver, Becoming a Vendor - Plasma Donation as Experience and Practice

As mentioned before, plasma can be a gift and a precious commodity. But just as whole blood it can be another thing: a potential source of threat and risk. Thus, keeping the harvested material safe and clean is a major concern in plasma centers. If risk factors (mainly pathogens) are not eliminated, plasma cannot become an adequate gift and its value as a commodity also plummets. My own brief "donor career" consisted of what seemed to be an endless line of regular check-ups and monitoring. Before each donation, I was required to fill out the same questionnaire about recent illnesses, acquisition of tattoos and piercings, vaccinations, travels, etc. Then, I needed to briefly chat with the doctor about my diet, my health, my sleeping habits. After every fifth donation, my plasma was closely examined for immunoglobulin levels, and after each fifteenth donation my blood was drawn, and the doctor carried out a longer examination on me. What seems to be an easy way to make money from the outside, is actually a closely regulated process – one cannot just start earning money from their own body (or offer a gift) without built-in guarantees of risk management.

3.1 Tainted Gift, Substandard Product – Plasma as risk and Donors as Potential Threat

Before, during, and after donation, the responsibility of risk management is shared by several actors, on several levels. This shared responsibility can become a source of conflict between donors and doctors since the deferral system is based on self-assessment. Donors are required to fill out a questionnaire upon first-time registration and consecutively before each donation. As Foucault observed, confession became one of the West's most highly valued techniques for producing truth which reaches from education, private lives, marriage, justice to medicine. Plasma centers (just as blood donation centers) are part of this confessing society and every plasma donor in it is a confessing animal (Foucault 1978, 59). They are obliged to provide information about their medical history, the countries they visited, their sexual lives (the "privileged theme of confession"

[Foucault 1978, 61]), recent tattoos, piercings (due to infection risk), pregnancies, and so on. The usual medical examination is restricted to blood pressure and pulse measurement, listening to the heartbeat and lungs, checking the throat – it cannot give a comprehensive picture of the prospective donor's health. Hence, risk management is shared by the doctor and the donor and it leads to frictions. Generalizations cannot be made about other Plazma Pont centers and centers operated by different companies, however, it could be assumed that similar frictions occur due to the similar compensation systems, medical standards, and staff structure.

According to Ulrich Beck, risk has become ubiquitous in our society, something that requires constant management, either from the state or the individual – this is what he labels risk society (1992). However, another process is unfolding which he calls 'institutional individualization' where the state through rules and procedures increasingly places responsibility on individuals, rather than on social groups (2002). Thus, risks as well become "de-socialized, privatized, and individualized; they become a responsibility of the individual, and a way for the government to govern the conduct of individuals" (Lidskog and Sundqvist 2012). It is important to note that this process is intimately connected to neoliberal governmentality. In the light of this, the majority of *risk management* is placed on donors themselves for their own and the recipients' sakes: maintaining sexual monogamy, maintaining a protein-rich diet, taking care of sufficient fluid intake, not visiting several centers simultaneously to gain more money. It is primarily up to them if they 'care for their bodies' for the sake of making more money, for preserving their health, or benefiting the recipients of plasma-derived medicines.

Doctors handle the other side of risk management, however, they have limited means to prevent potential resistance from donors. Handling temporary or permanent deferral is an especially neuralgic issue for some donors. It usually not because of the feeling of inadequacy or "refused gift" in the Maussian sense, as with blood donors but because of the financial repercussions, the

lost income. It should be noted that the online booking system of Plazma Pont is designed in a way that it prevents too frequent donation: appointments for donations can only be made with 3-day intervals and if protein or immunoglobulin levels are too low (protein is measured after every donation, immunoglobulin after every five), candidates are automatically excluded for a longer period. Doctors try to ensure both the safety of donors and recipients. They are required to prevent too frequent donations, filter out potential donors with illnesses, check the changes in the health conditions and crucial numbers of donors. However, since plasma centers are commercial enterprises, in-built mechanisms prevent the deferral of too many donors. Potential candidates have to fill out questionnaires about their general health (before the first donation and then before every donation) – but it is based on self-assessment. Doctors have limited means to verify them. Still, several indicators can be checked, since all bottles of plasma taken are analyzed in the laboratory of the center - these are mostly connected to the overall quality and usability of the raw material (protein and immunoglobulin levels are measured, plasma is checked for Hepatitis B and C, syphilis and HIV).

Plasma donation is not purely governed by the ideal of gift-giving, the financial incentive built into the process destabilizes the doctor-patient relationship as well. The usual authority surplus of doctors wanes as donors become more like vendors or entrepreneurs, offering a biological service or product. It renders them more assertive, so they argue more with the doctors, they are more aware of their entitlement and rights. Additionally, they are less vulnerable because they are healthy. "Sometimes people deny things" – says one of the doctors – about fluid intake, eating, sleeping, or even medical conditions. There is no unified database shared among the competing plasma center branches, so shifting between places is possible (although formally forbidden by every Hungarian plasma center regardless of affiliation), to override the maximum amount of 45

donations allowed by the state.[1] The medical staff can see the traces of these acts of donor resistance – bending the rules seem to give some sort of agency to the donors in the system. "You cannot lie about low protein levels, but the doctor cannot accuse them [the donors of switching between different centers], there is no evidence, but the doctor knows and sees. Once the levels are good, once the donor comes after two weeks and it's very bad, then they come after three days and it's good again…it's not by itself". Inconsistent levels of protein and immunoglobulins are a good indicator. Some donors use both hands while donating (so the veins on both of their hands are appropriate to puncture) – some of them use one hand in one center and the other in another center: "we cannot puncture one of their hands for some reason, and they really don't want to roll up their other sleeve…because there's still a bandage on their arm [from another donation]". Based on the accounts of assistants and doctors, they learn by experience the donor "tricks" to evade the '45 donation/year' limit, but there is not much they can officially do (their only possible "penalty" is temporary deferral).

Some of the donors just cannot accept deferral (temporary or permanent) or the rule that they need to wait a few days in between donations. These acts of resistance point toward the agency possessed by the donors, even though exploitation is commonly associated with them (Kretzmann 1992; Anderson and Snow 1995; Hobbs 2020). Cindi Katz's nuanced definition of resistance differentiates between overt and more subtle forms of resistance (2004). Besides overt resistance which explicitly aims to achieve change and emancipation, groups and individuals can utilize resilience (endurance and survival amidst hostile, oppressive circumstances) and reworking in which negotiations and transgressions are carried out in a system or institution to improve one's situation. Donors utilize this 'reworking': they bend rules, lie or do no tell things about their health

[1] The head of marketing of Plazma Pont mentions that the Hungarian state plans to set up a joint database with the participation of all plasma centers in Hungary. He adds that their company (Plazma Pont and Biotest AG) would fully support such an initiative.

conditions, and push their physical limits to gain more income from the institution (which reinforces the commodity-like understanding of plasma). Paradoxically, with this resistance, they contribute to their own exploitation and might endanger the health of the recipients or themselves. One of the doctors recalls an incident with a family of seven brothers who always donated together: "they came back to pester us to allow them to give more often". Later, one of them contracted Hepatitis C and was excluded from donation. However, finding the contact and channeling him into the medical system was difficult: "it [admitting diseases and seek medical help] is shameful among Roma people". It also hints at the limits of permeability of the semi-medical sphere of plasma centers and official health care which is discussed more in detail in chapter four. The PR of plasma centers prefers to highlight the advantage of 'free medical check-up' that comes with regular plasma donations but in practice, there is no guarantee that people get professional medical attention even if they are advised to.

3.2 Who Gets to Become a Bodily Entrepreneur? – Donors' Differing Abilities to Participate in Bodily Commodification

As it was discussed in the previous chapters, in whole blood donation it is crucial who gets to give "the gift of life" – the ability to donate blood can be a form of inclusion and exclusion alike. It is not so different in plasma donation either, although financial gains acquire a greater role in this process. The accessibility of the centers also influences who can become donors, i.e. who can effectively turn their bodily tissue into a commodity, exercise a sort of "bodily entrepreneurship" to gain income. Possibilities are not equal in this regard for every social group. Most companies (including Plazmaszolgálat Kft. which operates Plazma Pont centers) have centers mainly in Budapest and regional centers, bigger rural cities. Plazmaszolgálat specifically have three centers in Budapest, two in Szeged, one in Székesfehérvár, one in Győr, in Kaposvár, in Sopron, in Debrecen and in Szombathely. In the beginning of the research, a specific focus was not placed on the connection between poverty and plasma donation, however, due to the financial incentive, this theme has proved to be a salient one. In the case of whole blood donors (who are not paid),

the typical profile shows a tendency for higher levels of education (Healy 2000) and higher income and socio-economic status (Béla-Csovcsics and Kincsesné 2017). However, the head of marketing of the Plazma Pont centers explained a similar phenomenon. In Győr – a city/region which has one of the highest levels of education and income in Hungary - the local center is the most frequented and has the most reliable, recurring donor pool. In Kaposvár and Debrecen – which are amongst the poorer cities/regions in the country – donors are more likely to drop out or not come regularly (personal communication 2020).

Most of my informants, including the head of the center, the head of marketing, and two doctors, differentiated roughly the same typical donor groups. The biggest ones are 1) students, 2) donors who treat compensation as a calculable monthly income but could do without it if necessary, 3) donors who cannot afford to lose this type of calculable income and 4) 'true altruists' as the smallest percentage (these are informal labels given to me by the head of marketing). Students are regular visitors, since most cities where Plazmaszolgálat has a center, also have universities (Anderson, Newell, and Kilcoyne 1999 describe a similar tendency in the US). Urban poor people who live nearby or can travel visit centers, but poor people living in the rural areas of Hungary remain an "untapped" source (plasmapheresis machines are hard to move, so mobile donation points cannot be established). These "untapped" sources remain an object of desire and risk for centers. One of the doctors sarcastically remarks that if mobilization of pheresis machines were viable "we [the center] would just go to the Tiszántúl [one of the poorer regions of Hungary] and would just tap everyone". It is the same ambivalent approach concerning the poorer, recurring donors, such as the above-mentioned seven Roma brothers who always donate together. Their "abundance" is desired and feared simultaneously: they donate a lot and often, but their eagerness and increased dependence on financial compensation render them risky. The racialized fear of infection seems to be present regarding Roma donors, but their bodies are made 'bioavailable',

valuable only as to make others live or made into a commodity – just like in the case of Mexican citizens who cross the border to donate plasma in the US (Hobbs 2020, 80).

It is also important to note that poverty adversely affects health (McDonough, Sacker and Wiggins 2005; Abernathy, Webster and Vermeulen 2002; Marmot and Bell 2011), thus it can be assumed that under a certain level of poverty, people are so deprived and weak that their bodies could not bear regular plasma donation. Thus, the socio-economic conditions of the donors are shaped by the particular geographical distribution of poverty in Hungary. In Hungary, the poorest regions with the lowest levels of employment, education, and resources are concentrated rural areas, primarily in the southwestern and northeastern parts of the country (Kulcsár, Obádovics, and Bruder 2011; Koós 2015). It is curious to see that Plazmaszolgálat has not opened centers in these areas (except for the aforementioned Kaposvár and Debrecen ones), they focused mainly on Budapest and the western regions – which are the wealthiest. As the head of marketing explains, the company looks for the necessary amount of available medical staff (25 persons including doctors and assistants) in cities before they open a new center: "For example, in Ózd [which is among the poorer cities in Hungary] where there is no health care faculty, it would be hard to gather them [the 25 person-staff]". He also points out that the social history of a city counts as well in the success of a local center: in industrial cities where worker culture was stronger, people are more willing to give blood and plasma. He sees it as the continuation of the socialist culture of blood donation in Hungary (personal communication 2020).

Another group that often appeared in my interviews as donor candidates and a feared/desired "untapped" source was urban homeless people. It is a dilemma for Hungarian plasma centers whether to leave this potential source of profit or take the risk of what they perceive as a possible threat to the homeless donors themselves and/or recipients of plasma-derived medicines and accept their plasma. Different plasma centers in Hungary take a different approach on this and the

dilemma highlights the commodity aspect of plasma even more. One of the competitors of Plazmaszolgálat Kft. was described as the 'black sheep of the Hungarian market' that lets in everybody without checking, including homeless people. This company is described as greedy and careless by the head of marketing as they eagerly tap into the hidden pool of homeless people. The policy of Plazma Pont is not letting them in without a registered address (temporary homeless shelters are not accepted) and workplace. The head of the marketing mostly reasoned for this policy for the sake of other donors, and the general, organized atmosphere of the center: "you wouldn't really lay on a donor seat which was used by a homeless person before – this cannot happen at us". In his interpretation, homeless people pose a danger to themselves (as they exploit their frail bodies) and repel other donors (so they are bad for business). The doctors rather reason with the safety of the donors themselves and the recipients: "One of them asked if I could write something else [instead of the low level of protein which led to deferral], nobody else sees it. When I said there could be health risks, they replied they don't care. But it's not worth it to get in hospital for 8-10 thousand forints". Just as in whole blood donation some people are considered "too risky" to offer a gift, in plasma donation some groups are regarded too risky to be let to turn their bodily tissues into a commodity (or to offer it as a gift, depending on the communication of the plasma center).

3.3 Habitus and Bodily Sensations of Plasma Donation

Upon entering a plasma center one can quickly identify the more experienced donors: they do not need a lot of explanation from the staff, they go through the steps of donation with confidence and nonchalance. During my first time, I was sitting anxiously in the chair, sweating, and with my heart pounding – in front of me, I could see a man casually scrolling through his phone, while the thick needle was being inserted in his arm. He did not even look, it was evident that he went through this several times. It eased my anxiety that one can become better at plasma donation with practice. While chatting with other donors, most of them soon started throwing dietary advice at

me: what to eat before and after donation, how to recover faster so that I can donate more often (the closed Facebook group for plasma donors was also full of such tips). Just like in whole blood donation, plasma donors have some influence on improving the quality of their gift/commodity. Most experienced donors had their own routine for going through the motions of donation as well as preparing and recovering from it – as if they developed a *habitus*. And this habitus could influence (to a sensible biological degree) how much income they could earn with plasma donation and how valuable (or safe) their "gift" would be.

Habitus entails the way people act in the world as social agents, it reflects social structures and people's socialization into them (habitus is also formed by individual life histories). However, habitus also shows how said structures are reproduced by people's actions (structuring structures) (Bourdieu 1990). The dispositions that make up habitus can include habits, beliefs, values, tastes, bodily postures, feelings, and thoughts that Bourdieu argued were socially constructed. The acquisition of these dispositions occurs during socialization, through experiencing the world and learning from others. Bourdieu's concept is often criticized for not allowing agency for social actors to act in novel, creative ways, just simply reproduce what is already known for them, in other words, it is imagined as rigid and deterministic (Lovell 2000). Bourdieu's concept – with some additions from Greg Downey, Trevor Marchand, and Loïc Wacquant – can help explain the practices and bodily techniques of plasma donors. Bourdieu's concept with the above-mentioned modifications can account for the fact that donors are "made" by physical/biological and socially acquired characteristics in conjunction. This can include the care of the body before and after donation, dietary habits, fluid intake, recuperation, handling bodily sensations during donation, and coping with individual physical differences.

Bourdieu's concept of habitus is often used to explain embodied learning and knowledge. Bourdieu himself asserts that embodied learning occurs through mimesis, unconsciously, without reflection or awareness of other communicational channels. It is direct communication from body

to body, a form of "practice without a theory" (Downey 2010, S25). However, what Greg Downey tries to prove is that embodied learning/development of habitus can be quite reflective and can be made explicit. While studying the individual styles and physical cultures of capoeiristas, Downey demonstrates that habitus cannot be viewed as a singular, unified structure but is more prone to change and variation (2010). Donors have differing bodily characteristics (ability to refill lost protein or immunoglobulins after donation, need for sleep, appetite, etc.) which renders them more or less prolific donors. Some of these factors can be reflected on (with medical or dietary guidance) and transformed (such as protein reproduction) but others cannot (such as immunoglobulin/antibody reproduction). The medical staff of the centers is there to assist in this process of forming a preferred habitus. It is vital to mention that these shifts and transformations in habitus have financial consequences. The better inherent physical abilities a donor has or the better they are at transforming/mastering their bodies (in the Foucauldian sense) and form the desired habitus, the more money they can potentially make and the more profit they can generate for the pharmaceutical company. Their plasma can become a more plentiful *biocapital*, in quality and quantity alike.

Marchand, while studying fine woodworkers and their learning techniques, also argues against Bourdieu's understanding of habitus in which unconscious acquisition is stressed. While in the original concept verbal and linguistic aspects are downplayed, Trevor Marchand argues that visual, verbal, and physical actions are intertwined and make embodied learning possible (2010, S101). Becoming a plasma donor can be understood as a type of embodied learning: people find out by experimenting and experience what works for them in recovery (frequency of donations, some can come every two weeks, others even twice a week), diet (some need three protein shakes per day to reproduce lost protein, others fare well with simple canteen meals). It is important to note that the habitus cultivated by different donors is not uniform. It is affected by individual bodily traits, social and financial situation. Based on donor interviews, it became obvious that some people have to put in more effort to become prolific plasma donors, while others can do it quite effortlessly.

Commonly, donors give each other dietary and recovery advice in Facebook groups. According to Wacquant, habitus expresses membership in collectives, attachment to institutions, and can account both for reproduction and change, conformity and creativity, and self-revision (2014, 119). For many of the donors, plasma donation is a collective activity. During my fieldwork I observed many couples and friends coming together, often the more experienced supporting the other. On one occasion, when a couple donated together for the first time, the girl (who was a first-time donor) felt dizzy so she needed to interrupt the process. Her boyfriend, a more experienced client, also stopped the plasmapheresis and went outside with her to help with the recuperation and to comfort her.

Plasma donation can contribute to developing a specific habitus but it also constitutes a particular bodily experience. Lynch and Cohn (2017) characterize whole blood donation as a series of divisions and separations: bodies from the person, blood from bodies, and consequent separations of blood itself (365). The same can be true for plasma donation as well. Initially, the donor has to fill out a questionnaire (upon first donation and then, at the beginning of each donation) and undergo a medical examination. These steps treat the donor as a whole person, focusing on their (medical) history, lifestyle, and behaviors. With blood and vein tests the attention shifts toward body parts which are assessed based on certain criteria. For example, the diameter and flexibility of the vein that can endure the more intense, repeated flow of blood back and forth – plasma donation is done with a thicker needle than whole blood donation, so the sensitive red blood cells do not get damaged during return. It is also more common that men have suitable, thick veins. Being connected to a plasmapheresis machine also provides a different experience than whole blood donation. The donor's blood is circulated in the machine which acts as an external circulatory system. Blood is filtered, centrifuged and formed elements are given back – only plasma is retained. The donor is connected to the machine via a needle and a cannula and performs the labor of harvesting plasma in tandem: the donor helps with pumping both the fist and the heart and the machine keeps the liquid in circulation.

To ease the process anticoagulation liquid (citrate) is administered which can cause side effects in rare cases (numbness, muscle twitching, or in more severe cases spasms, shock, or cardiac arrest). Some donors in the survey described discomfort such as being cold, feeling dizzy or fatigued, fainting or bruising at the site of the puncture. Some donors proudly explain that donation helped them overcome their fears and the center's atmosphere helped with their anxiety: "The place I regularly go to is very homely, although I have needle phobia". In the closed Facebook group for plasma donors, some members complain about the scarring that the repeated venipuncture causes – they are worried that it can be a source of stigma. "By now, someone could legit think I'm a junkie if they looked at the crook of my arm". Some describe the sensation as neutral or even boring: "It's a bit boring because it takes a long time" „A lot depends on the assistants of the pheresis room, how you feel. If everything goes smoothly and the puncture is right, then actually it's quite a neutral feeling". Others claim that it is a positive feeling altogether: "It's exciting, but because of the preparations it's a bit of a hassle". "The insertion of the needle is unpleasant and also it was cold inside, we were cold. It was not pleasant but the money made up for it". "It's a strangely alluring sensation, three days after the donation, I already want to go back". One of the center's assistants describes a seemingly strange subgroup of donors: "What I would like to know is how many donors actually become addicted. As you look at them, you can see that they don't need the money. They wear Tamaris boots, look like a yuppie but they become anxious if they cannot come. The Tamaris woman once complained that she couldn't give because of her low protein levels, another said that she doesn't even know what she would do if she couldn't give at least once a week…".

Blood plasma as a material is not inherently a gift or a commodity, social interactions within the plasma center (and outside of it) render it as one, the other, or the combination of the two. Additionally, the process of donation, the procedure of how a person becomes a plasma donor influence what the harvested tissue will become. However, solely the close study of social interactions cannot explain the peculiar shifts between the understandings of gift and commodity

when it comes to plasma. Institutions, their practices, and the narratives perpetuated by them also contribute to this. In the next chapter, I explore how altruism can stem not only from individual donors but institutions (i.e. plasma centers) as well. Just like plasma is shaped into a commodity by donors and plasma centers (and primarily by pharmaceutical companies) together.

Chapter 4: The Conflicting Institutional Narratives of Altruism and Commercialization

Upon entering, plasma centers seem peculiar spaces. The colorful interiors and uniforms of employees do not give the impression of a purely medical space, but the presence of plasmapheresis machines and phlebotomists in the donation hall tell another story. It is baffling how Plazma Pont centers emanate the atmosphere of a private health care provider (which is quite unknown to the average Hungarian, since most people cannot afford them) and a wellness center. In a neat glass cabinet, we can even find merchandise with the logo of the plasma center on them. The donation hall with its highly medicalized and technical environment is carefully separated from the main hall and the reception. It appears that the center strives to present the 'professionalism' of a hospital/doctor's office upon donation (so the donors feel safe) but before and after the process the aim is to soothe them, to make them feel as if they are having some 'me time'. Additionally, donors are affirmed in their sense of *giving* and *doing the right thing*. On the walls, we can find touching testimonies from long-time donors and in a glass cabinet, a nice assortment of plasma-derived medicines are displayed – the tangible end products of our bodily gifts. It is a dizzying array of mixed messages: the atmosphere of a private hospital and a wellness center, a profit-oriented business that sells an experience, a service, and an institution that fosters altruism.

The seemingly conflicting processes and narratives of *medicalization* and *demedicalization* appear on several levels of the plasma procurement procedure. On the conceptual/discursive level, on the institutional level (the plasma center), and within the micro-interactions in the center (doctor-donor, assistant-donor, donor-donor). In the first part of this chapter, I discuss the opposing and intertwining processes of medicalization and demedicalization that occur in the plasma center – which also inform the occasionally opposing intentions of creating profit and keeping the donors and future recipients safe. The two seemingly opposing processes enhance donor experience either by emphasizing or downplaying medical aspects in the different stages of donation – and thus help

to retain and recruit donors and generate income. In the second part, I explore the seemingly conflicting narratives of altruism and commercialization which are present in donor motivations, the practices of the staff and the management as well as in the institutional framework of the center itself. Instead of acting against each other and hindering the operation of the center, these processes and narratives work in tandem, get intertwined and reinforce each other.

4.1 Kissing the Wound - Medicalization and Demedicalization Intertwined

Although they might seem conflicting, medicalization and demedicalization can and do work in tandem, and occasionally complement each other. It is especially true in the case of plasma centers. Upon donation, donors prefer to feel safe and know that their 'gift' is being handled professionally, so it reaches its intended recipients. A more medicalized setting (with competent assistants and doctors) enhances this feeling of safety. However, before and after the procedure donors might prefer to unwind and forget about venipuncture, blood, and bandages. A colorful, relaxing environment can promote that. There is a changing degree of medicalization and demedicalization in the different spaces and stages of plasma donation which serves different purposes. Drew Halfmann's typology of medicalization can help to explore this further (2012). He claims that it is a continuous value – not a simple presence/absence, state, or category – that can increase and decrease (2012, 192) which can occur simultaneously with the process of demedicalization. Medicalization can be present in three dimensions: discourses (such as usage of medical vocabulary, models, and definitions in discourses about social phenomena), practices (biomedical practices and technologies become more prevalent in the administration of social phenomena), and identities (when biomedical actors and identities become more salient in addressing social issues). Halfmann explains that medicalization, as well as demedicalization, can be present on conceptual (macro), institutional (meso), and doctor-patient/interpersonal (micro) levels (2012, 189). Halfmann's innovation is the claim that the seemingly contradictory processes of medicalization and demedicalization can occur simultaneously, moreover, there is room for

resistance against the seemingly ever-growing medicalization (contrary to Foucault's statement about the 'open medical states' and the limitless nature of medicalization [Gougelet 2010, 56]). Incomplete medicalization provides an opportunity for resistance on the part of institutions and social actors, or alternatively, medicalization can disguise itself (2012, 201).

While discussing reproductive loss, Sara L. Martel highlights the distinction between medicalization and biomedicalization. Medicalization involves control over medical phenomena, while in contrast, biomedicalization entails a transformation of medical phenomena and bodies, largely through technoscientific interventions, not solely for treatment but also for enhancement (2014, 332). She describes reproduction as a process medically managed as a social resource and technomedically enhanced and administered as a source of capital – it becomes the object of biopower, and as such the object of discipline, security, normalization (2014, 333). Plasma can be characterized the same way; it is a biological material that comes to be treated as social value, thus the aim is to make blood and the body that produces it productive and docile through certain 'technologies of the self'. Martel points out that this eagerness of biopower towards care and productive cultivation can even be seen as uncontroversial and non-political, thus biomedicalization gains a positive connotation. Plasma centers similarly claim to protect, enhance and care for donors (by regular medical check-ups for example), encourage certain forms of Foucauldian 'care of the self' to foster better quality plasma.

As it was discussed previously, due to its mechanical characteristics, plasmapheresis (the medical procedure of removal, treatment, and return/exchange of blood plasma or components from and to the blood circulation) "disintegrates" blood to its components already upon donation, provides a different body awareness than regular blood donation. The donor is connected to a machine that takes and gives back some of their blood (the so-called formed elements, such as red blood cells, white blood cells, and platelets), and separates the donor from the future recipient. The plasma collected in separate plastic bottles from separate donors is pooled and then treated further

through biochemical processes which decompose raw plasma to its components (immunoglobulins, coagulation factors, albumin, fibrin glue among others). Thus, one patient might receive plasma-derived medicinal products (PDMPs) from several donors, and vice versa, one donor's plasma can treat several recipients. When describing this odd contradiction, Jacob Copeman uses Niklas Luhmann's *unitas multiplex* concept, 'a unity that is a unity only as a multiplicity' (2005, 471). Plasma is handled as raw material which will be taken apart into even smaller components until it cannot be recognized as human anymore – it will be turned into artificial medicine, a *biological product*. Plasmapheresis involves venipuncture and extended periods of being connected to a machine which renders it an unpleasant experience – doctors and assistants are there to ease this sensation and inform donors about the undeniably medical aspects of the process. Before each donation, a quick medical examination occurs (measuring of blood pressure and hemoglobin levels, verbal assessment from the doctor, filling out a medical questionnaire), after every 15th donation a haemogram test is carried out.[2] Additionally, medicalization (medical examinations, analysis of plasma, monitoring of donors' health) serves as an initial quality assurance (which is followed by many others in the pharmaceutical production), which is intrinsically connected to the commercial aspects of plasma donation. The constant monitoring of the donor's health and plasma quality is said to be done primarily for the sake of the donor, however, it is also the key to acquiring 'quality product' for the parent company.

In contrast to this, the center itself tries to negate or downplay the medical aspects. Advertisements describe donation as recreation (an hour of resting, 'time for oneself'), visitors are encouraged to read, listen to music or use the free wi-fi provided by the center. As one of the doctors and the head of marketing explained, venipuncture is rarely mentioned, so people with blood and needle phobia will not get discouraged ("the marketing department doesn't like when we say there's

[2] The plasma center presents this as an additional benefit, a type of free medical examination which can give a good assessment of the donor's overall health and could help in the prevention of diseases. However, as one of my donor interviewees – a medical student – informed me, this analysis cannot be considered a complete blood test since it includes only very basic and insufficient data.

puncture"). The head of marketing explains that on one side the center wants to present the sense of medical professionalism to evoke feelings of trust and security in donors, but seeks to avoid the sense of 'doctor's office' with silence, sterility, and white uniforms. "It needs to be colorful, cheerful, dynamic to make you forget that we are going to stab you". Both of them confirmed that plasma donors are rather referred to as 'plasma givers' which takes the medical tinge of the word 'donor' and emphasizes the altruistic element of plasma donation (the doctor explains that 'donor' sounds too cold for the PR employees and according to them evokes the association of 'kidney donor'). Potential risks and potential side effects are not listed on the official website, the aspiring new donors learn about these later, from the doctors in the center. The environment of the center is arranged in a way that masks the medical milieu (colorful interiors and uniforms, the ward-looking donation room is separated from the pleasant reception area). The doctors and assistants intentionally do not wear white – different colors signify the different functions in the center, they help to orient the donors ("just like in Star Trek" – says one of the doctors). These arrangements help retain and recruit donors as well as enhance the donor experience, thus contribute to the commercial aspect of plasma donation.

As it can be seen, the increased levels of medicalization in discourse and interpersonal exchanges are maintained mostly by the doctors and assistants working in the center (as the doctor of the center points out, "I deem it important that donors know about the medical part, it's not just about leaning back in the chair. It's not just about muffins and unicorns"). It is also obviously present on the institutional level: the presence of needles, medical equipment (pheresis machines, rubber gloves, bandages) is obvious, as well as the lab where the plasma is collected and analyzed and which is visible from the reclining donor chairs. Moreover, plasma centers have overlaps with the official statal medical sphere: their employees (assistants and doctors) are recruited from hospitals, ambulance service, medical universities. My doctor informants described this job as a 'back burner' for doctors at the beginning of their careers and residents who do not have their specialization exams yet. Usually, they stay on the job for a few years, for it provides a good salary for performing

low-risk medical tasks, but later on, they look for jobs with more responsibility. Many medical professionals switch for plasma donation to escape 'burning out' in the Hungarian state health care system (private health care in general, is a common escape route for them in Hungary). Donors who have unknown pre-existing medical conditions, become ill or their health declines throughout donations can be channeled into the official health care system. However, the disguise of medicalization Halfmann mentions occurs on the institutional plane (as the marketing department strives to conceal the medical aspects of donation and tries to arrange the center's space in a way that masks the medical atmosphere of the center). The official communication of Plazma Pont also resists medicalization as it underplays and avoids medical language and expressions when describing plasma donation.

4.2 Good Samaritan Reward - Altruistic Framework Laced with Financial Incentives

Plasma offers itself less easily to gift-like associations than blood. How to make it seem like a 'bodily gift' when donors and recipients are so far away from each other? Plasma passes through many steps of biotechnological treatment until it becomes life-saving medicine, it becomes almost artificial by then and it will aid numerous, unknown patients. It also makes its way through pharmaceutical companies that make enormous profit from it – its path is almost untraceable as it moves abroad and then back to Hungarian patients. It is difficult to establish an intimate, close bond with plasma. After one donation I ask the assistant to let me touch the bottle – she is slightly surprised since it is not a common request. I feel my own body heat – I am reminded that it is the fruit and gift of my body. But I also think about how much money this bottle of plasma is worth, even in its raw form. Kath Weston (2013) - while talking about efforts to develop synthetic blood - criticizes this alienation inherent in blood storage and transfusion (and blood economies in general) because it dissolves direct relations between blood donors and recipients, undermines familial and communal ties, the community, social solidarity granted by voluntary, unpaid gift economy (in her argument we can discover significant nostalgia for vein-to-vein transfusion which

in this form almost has completely disappeared). Her observations regarding contemporary blood economies can be applied to plasma donation as well. Weston argues that the narrative of donor recruitment emphasizes the traditional (and by now waning) face-to-face relations between donors and recipients but conceal the capitalist modes of production and marketing of blood products. Patricia Mahon-Daly also emphasizes that the biomedicalized mode of procuring and managing blood products leads to a more distant, mediated, and indirect relationship between donors and recipients (2012, 54). Nonetheless, the discourse of 'the gift of life' remained (which carries Titmussian undertones which is perpetuated by institutions like WHO or the British NHS, and even Plazma Pont), while commodification of blood drives contemporary blood economies. As if trying to refute this criticism, the PR communication of plasma centers tries to reestablish donor-recipient connections – such efforts also reinforce the altruism discourse of plasma donation. They emphasize the immediate reception of plasma, publish videos of patients thanking donations (especially from the patients' rights group Hemofíliások Baráti Köre/Friend Group of Hemophiliacs), on their websites make elaborate lists of usage with detailed descriptions of conditions that require plasma and PDMPs.[3]

Kieran Healy proposes that altruism should be considered from an institutional perspective. Altruistic behavior is not the result of individual altruistic urges and motivations, but altruistic frameworks offered by institutions that are either accepted or rejected by participants (2006). Elsewhere he points out that (blood procuring institutions) develop different institutional perceptions on altruism and thus produce specific cultural accounts of donation (2000). Plasma centers offer such altruistic frameworks. The official communication (website, social media) emphasizes the selfless act of donation, the marketing department publishes thank you videos

[3] The plasma center regularly arranges prize competitions and quizzes in which they ask donors if they know about the usage of plasma and which conditions require PDMPs. I also asked my respondents in my online survey if they knew about its possible usages, and most of them could list at least two. The most mentioned were hemophilia and immunodeficiency, after them burn injuries and COVID-19. It could be assumed this high level of awareness is due to the effective communication of the plasma center, since most of my respondents were not medically trained people.

from hemophiliacs[4], advertising with hemophiliacs and donors together (it was done by another branch of plasma centers called Vascular Plasma). In the PR of the plasma centers (not only Plazma Pont but the other branches as well that are present in Hungary) the altruistic expressions are highlighted: donors are called 'lifesavers', even 'heroes' – the Kedplasma group even started an exclusive private Facebook group for donors over 45 donations called Heroes' Club (Hősök Klubja). Donors are invited to claim these titles and as the online survey showed, donors readily take these altruistic narratives offered by the institution. "A child I know takes medicine weekly which is made of plasma, they need plasma for the rest of their life. It's only a drop in the ocean but I feel like it means life for someone". Another donor respondent simply quotes the motto of Kedplasma in the survey: "Help is in our blood". Many responded quite simply that "I like to help ill people" or that they are motivated by being able to "help ill people".

However, this does not mean that plasma centers deny or downplay the financial incentives, rather they present altruism and financial gain as motivations and effects acting in tandem and reinforcing each other. The motto of Kedplasma goes like this: "For life-saving you get money". Vascular Plasma puts the amount of average yearly income that can be gained from regular plasma donation with the slogan 'You can save lives' and 'lifesaving medicines are made from blood plasma'. In one of Sanaplasma's advertisements we can read: 'For good deeds, you can expect something good – Save lives and make 6000 Ft per occasion or even 270 000 Ft per year!'. These narratives are adopted by the donors as well. "Primarily I applied for financial reasons. But after I learned that they are making lifesaving medicines (from plasma) it became inspiring. And now that I went through the COVID infection, it became even more crucial that my plasma is needed". Another respondent as well describes such shift in motivations but the other way around: „First I wanted to help, but meanwhile the regular compensation got built into the family budget". "You can

[4] The manager of Corvin Pláza Plazma Pont told me that in the past the center arranged meet-and-greet events where donors and recipients could socialize. It provided an opportunity for donors to learn about the usages of their plasma and establish a connection between their act of giving and the act of reception.

donate more often than blood and there's more compensation". "I help other and I have money for the bus pass :D" – commented another donor. "At least I don't do warehouse packaging for 1000 Ft per hour. It's over quickly and has an added value to society". It proves that an institutionalized altruistic narrative can reinforce donation even when the primary interest lies in financial gain. Even those more interested in money readily accept the altruistic narrative when presented to them. Those who actually donate as a form of altruism, find an institutionalized form for it. Some people switched from regular blood donation – for them, it is a new form of altruism that can be done more often: "It is less burdensome for the body than blood donation and you still help more people".

Plasma centers often organize or participate in other types of charitable events (i.e. as institutions plasma centers donate money to NGOs, they joined the nation-wide "shoebox" campaign; asking donors to prepare Christmas gifts in a box for children in need and the center send the boxes to them). Plazmaszolgálat Kft. which operates Plazma Pont stations participates in the Hungarian state-operated program for collecting convalescent plasma from recovered COVID-19 patients as a form of passive immunization for severely ill patients. In this project, the for-profit enterprise cooperates with state-funded organizations like the National Public Health Center (Nemzeti Népegészségügyi Központ) and the Hungarian National Blood Transfusion Service (OVSZ) (contrary to the reactions seen at the center of OVSZ, the head of marketing describes their relation to the state institution as cordial). As the head of marketing points out, collecting convalescent plasma has no commercial gain, it is transported directly to hospitals. In the Győr center – which is their most frequented Plazma Pont station in Hungary – this non-profit activity is even adverse for business since it takes donor seats/capacity: "However, we have enough readiness to take social responsibility, a sense of duty, so that we make this sacrifice, so to say". The convalescent plasma program is another addition to the firm's institutional altruism portfolio. Besides this, many donors join the biggest Hungarian Facebook group created specifically for plasma donors. Here, people often seek donors for directed donations for family members and

friends – and some plasma donors enact their altruistic intention by giving whole blood as well. The group also serves for people to *perform* altruism (i.e. they discuss how great it feels to help others and how many times they donated already), it is rare that someone openly acknowledges in the posts or comments that they give plasma just for the money. Members also *practice* altruism by helping and giving advice to each other about protein-rich diets, coping with dizziness, fainting, or illnesses, taking care of puncture scars, and explaining the process of donation to newcomers.

Altruism and gift-related associations do not only stem from the materiality of plasma or the individual motivations and actions of donors – it can be nurtured and supported by institutions as well. People are ready to claim the altruistic scripts offered by the plasma centers, thus the financial incentive seems less shameful to admit, it becomes rather an additional reward for doing something good. These narratives are designed to make donors feel pleasant and confident, just as the emphasizing and downplaying of medical aspects serves the purpose of creating the aura of safety, comfort, and reliability. Donors will donate more often and are assured that their 'gift' is in good hands and will reach its intended recipients.

Conclusion

Several salient themes have emerged while conducting field research in a Hungarian plasma donation center. It was evident that plasma donation is fundamentally different from whole blood donation – even though plasma is essentially a component of whole blood. It should also be noted that plasma donation shares some similarities with whole blood donation regarding practices, technicalities, and motivations alike. The presence of financial compensation rendered the concepts of *biocapital* and *biological labor* crucial in understanding the practice of plasma donation. It appears to be a purely commercial endeavor, but during the research, it became clear that plasma is both positioned as a commodity and a gift, which generates tensions in the different stages of donation and the interactions surrounding it. Gift- and commodity-like aspects permeate the different stages and levels of plasma donation. Plasma as material and bodily tissue already carries potentially gift- and/or commodity-like traits, however, it is the social interactions and exchanges surrounding it that render plasma gift, commodity, or the amalgamation of both. These interconnections are complicated further by the practices and communication within plasma centers: the interactions between the donors and the staff contribute to the altruistic and commercial motifs of plasma donation alike. And lastly, the plasma center as an institution (which includes the management, the PR team, the administrative/financial staff) perpetuates certain narratives that reinforce both altruism and commercial endeavors (to different degrees and in different stages of the donation process).

Plasma as (Bio)capital and Donors as Laborers

While plasma donation seems like the simple harvesting of the natural reproductive processes of human physiology, I argued throughout the chapters that it entails labor, more precisely *biological labor*. In this regard, I follow the argument of Alana Cattapan (2016) who considered egg donation/extraction as a form of labor, rather than medical intervention. Just as those people who decide to give away eggs, plasma donors participate in an industry where most actors benefit more

than them (doctors, pharmaceutical companies, lawyers, etc.) while they are the ones taking the most risk but benefit less financially (244). Similar to the efforts of clinical trial participants, plasma donation is not recognized as labor, since subjects only give access to the productivity of their in vivo biology – however, their living tissues and reproductive processes still perform biological labor. These seemingly minor, unacknowledged reproductive processes are encompassed in the neoliberal restructuring of capital which opens up new reserves of surplus labor power and as well as a surplus of reproductivity (Waldby and Cooper 2008, 60).

To grasp this restructuring, one needs to turn to Foucauldian and Marxist analysis. While synthesizing the concepts of Marx and Foucault, Antonio Negri argued that in this neoliberal restructuring of capital, life itself is turned into labor and bio-value supplementing and even substituting traditional and more abstract forms of labor (2017). The transformation of productive (working) bodies and of "ways of life" occurred – which can include biological, cognitive, or emotional labor. "Ways of life" are turned into "means of production" (2017, 211). This change entailed a shift from the production of goods to control over the life embodied in labor which presented capital as biopower (46). The capitalist command is no longer exercised over the factory but expanded to the exploitation of the whole society. It "extends to and exploits the lives of workers, of society in its full extension, and thus defines itself as 'biocapital'" (78)[5]. Kaushik Sunder Rajan argues that "life sciences represent a new face, and a new phase of capitalism and consequently, that biotechnology is a form of enterprise inextricable from contemporary capitalism (2006, 3). However, capitalism did not 'cause' the particular development of life sciences, merely provided a context for it. Just as Negri, Rajan claims that this new phase can be associated with "an implosion of capitalism with 'life itself'" (2006, 171). Hence, new life science commodities –

[5] It should be noted that despite this extension of exploitation towards the totality of life, Negri claims that resistance is possible. Cognitive and immaterial labor performed in the biopolitical sphere cannot be completely consumed in the process of capitalist exploitation, does not only accumulate value but creates residues, alternatives of expression and development, in other words, possibilities of exodus (2017, 47). Workers thus become 'precarious' and 'independent' subjects at the same time (78).

such as therapeutic molecules, genome sequences, pharmaceuticals – require new, reinvigorated analysis of capitalist practices as well as the emerging kinds of citizen, corporate and scientific subjectivities connected to these activities (Helmreich 2008, 464).

Even though Rajan focuses on a comparison of the US and Indian biotechnological industry which deals with genetic medicine, several similarities can be found with plasma donation. First of all, plasma can be regarded as a 'new life science commodity' that Rajan mentions. He argues that within the US rhetoric around genetic medicine, echoes of the Weberian Protestant ethic can be found – these new medicines possess value in the *market sense* and in the *ethical sense* and co-constitute one another in biocapital. This leads us back to the intertwined narrative of *commodity* and *gift* around plasma that I have discussed in the previous chapters. While comparing the US and India and their interconnections within the global pharmaceutical commodity chain, Rajan points out that the new genres of biocapital depend on older, colonial structures of subordination: usually unemployed Bombay textile workers are enlisted as 'volunteers' for pharmaceutical clinical trials for US companies. Even though the limits of the thesis did not allow me to explore the global aspects of the plasma industry, it is worth noting that Hungarian plasma donors 'feed' Japanese, Italian, and German pharmaceutical companies with raw material. The know-how and processing technology is abroad, while raw material is harvested *en masse* in Eastern parts of Germany, the Czech Republic, Austria, and Hungary.

As Stefan Helmreich points out, Rajan puts less emphasis on the 'bio' part of biocapital.[6] His focus is more on capital since he analyzes global processes. However, since I focus mostly on the interactions within the center and the practices of donors (*biological laborers* in a sense), I have found Negri's labor-focused discussion more useful for my purposes (see chapter two). Additionally, I

[6] Helmreich breaks down biocapital in a similar vein as Marx does (M-C-M'). He offers the equation of B-C-B': biomaterial is turned into commodity through laboratory and legal instruments. Finally, biocapital (B') is produced at the end of the process with value added (') through the instrumentalization of the initial biomaterial (2008, 472).

have diverged from Rajan in concentrating more on plasma's materiality. Unlike many other scholars who focus on donor identity and practices in blood and plasma donation (Thorpe et al. 2020; Bagot et al. 2013; Bove et al. 2011; Ferguson et al. 2012; Cohn 2016), I put more emphasis on the materiality of the substance donated and how it affects and alters the social interactions and practices within the centers, and partially how it renders the process different from whole blood donation. Following the posthumanist approach of Lynch and Cohn (2017), I briefly discussed the interactions of non-human (plasma) and human actors (donors, medical staff) and revealed the material traits that render plasma an ideal substance for commodification. However, it is worth noting that the potentiality of biocapital is not already latent in biomaterials. Organisms cannot be imagined as laborers and reproduction is not a transparent, 'natural' process – human meddling, intervention, and certain social relations make them 'profitable' (Helmreich 2008, 474). Plasma is not gold waiting to be dug out, its procurement and handling are in no way 'innocent' or 'natural'. First and foremost, it is a type of human tissue that happens to be easy for the body to reproduce and easy for the industry to harvest. Plasma as raw material is 'made', rendered 'productive' within the web of the social interactions happening in the centers, between the donors and medical staff (and on a wider scale in the global commodity chain which I could not explore in detail in this thesis).

Interconnections of Gift and Commodity in the Field

Throughout the chapters, I explored how the seemingly contradictory notions of gift and commodity, altruism and commercialization keep my field, the Corvin Plazma Pont center in motion – from the smallest 'actant' (plasma itself) to the largest structure (plasma center as an institution). As I have stated before, I have done the bulk of my fieldwork in a sole plasma center and only gathered data about the pheresis centers operated by Plazmaszolgálat Kft. Hungary is a special case, since plasma procurement is performed in a competitive, privatized, commercial environment (similarly to Austria, the Czech Republic, and Germany): seven different branches

operate centers in the country. Current regulations forbid moving between different centers, donors can be permanently deferred for switching. I intended to follow these regulations, thus my fieldwork was limited since I could not explore the practices of other centers. Thus, my findings cannot be generalized uncritically, it can only be assumed that tensions, practices, and interactions are somewhat similar, since the national regulatory environment is the same and the process of plasmapheresis, donor registration, and the requirements for the medical staff are alike. Where comparison was necessary, I had to rely on online sources and social media or the accounts of people who had experience with other centers. It should also be noted that the range of this thesis did not allow me to explore the global system of plasma procurement (e.g. manufacturing, processing, import, export, global legislative system) which informs and heavily influences the practices, methods, and interactions within the initial location of plasma centers. I regard the 'global' and the 'local' as different stages of the same circulatory system that cannot be separated from each other if we want to understand the whole. For my thesis, I had to 'artificially' cut the level of the centers.

The main source of (fertile) tension is between the narrative of gift and commodity in the process of plasma donation. As a human tissue voluntarily given, plasma is presented as a 'gift' in the communication of the plasma centers. In social media campaigns, advertisements, information materials certain altruistic narratives and frameworks are offered for the donors which are taken up enthusiastically. Although it is not a universal practice. In some recruiting campaigns, altruistic and financial incentives are utilized in tandem (e.g. in the Plazma Pont mentor program where regular donors are encouraged to recruit 'newbies' for increased financial compensation). In public accounts (e.g. in Facebook groups, in personal statements published on the websites of the plasma centers) donors often claim having altruistic motivations, while in private exchanges (such as donor interviews, surveys) many of them bluntly admit to donating simply for the money. Additionally, plasma centers as institutions (at least those operated by Plazmaszolgálat Kft.) often engage in

charitable projects, such as collecting gifts for children in need or donating money to or cooperating with Hungarian charitable organizations.

Tensions arise between donors and the medical staff which stems exactly from the presence of this dual narrative in plasma donation. Donors appear rather as vendors and entrepreneurs than patients, their bargaining power is increased due to their better general health conditions (most of them are not reliant on their doctors for recovery), occasionally they even question or argue the evaluation of the doctors (mostly regarding deferral). Some donors even lie or conceal their illnesses or the factors that would contribute to their deferral – while their doctors are interested in protecting both the health of donors and recipients. From different viewpoints, donors carry potential risks and abundance. Eagerness and ability to give more often is alarming for the medical staff (since it potentially endangers both the donor and the future recipient). Every new 'body' arriving in the center is potentially risky for them until proper medical examinations. While such abundance in the number of donors and donations is favorable for the management. The leadership of the centers is motivated by attracting more donors/increasing the frequency of donations from the same donors, hence boosting revenues. Their advertisements and campaigns occasionally encourage more frequent donations than what is medically advised, which generates friction between the medical staff and the management. A further source of tension stems from the conflicting narratives and intentions of medicalization and demedicalization in plasma centers. While the management aims to downplay the medical aspects of plasma donation (e.g. creating an interior design that eliminates medicalized connotations, not emphasizing the inevitable venipuncture, positioning donation as 'me-time' or 'wellness'). While the medical staff aims to inform donors about the medical aspects of the procedure, warn about potential risks or side effects, and carry out the less pleasurable procedures of the donation (such as venipuncture, examination, tending to the wound, dealing with adverse effects). However, the occasional, strategic downplaying or emphasizing of medicalized aspects can enhance donor experience: being treated by medical professionals while donating fosters the feeling of safety, but not being

reminded of medical procedures before and after donation reduces anxiety and makes donors feel more relaxed.

Initially, the ethnic and socioeconomic markers of donors were not the main focus of my research, but the topic kept emerging during my fieldwork and interviews. These factors are rarely addressed publicly in the centers, but they kept appearing in personal exchanges. Based on the limited number of interviews with different participants of plasma donation, Roma and homeless people are often seen as carriers of risk. The 'abundance' of Roma donors is seen as suspicious: they give too much, too often, while their perceived dependence on compensation renders them risky since they are thought to be more prone to hide potential illnesses. On the other hand, the 'meagerness' of homeless people poses a different risk: their bodies are seen as so deprived that regular plasma donation jeopardizes their health as well as the health of the recipients. These findings are only preliminary, the limited fieldwork time did not allow detailed exploration, however, it is a further direction in which this research can be expanded. It could also shed more light on the connection between the notion of 'risk' and 'gift' which was discussed briefly in chapter three.

Plasma donation proved to be a rich topic and the center where I conducted my research provided me with abundant material. However, this thesis could not explore all the aspects and interconnections. Future research could address the global circulation of plasma and regulation of plasma donation and transport. The comparison of whole blood donation and plasma donation could be discussed further (with a focus on materiality, for instance), as well as the profile and motivation of plasma donors. Comparison of different national plasma donation systems (through multi-sited ethnography, for instance) could also be promising and enlightening. All these directions could enrich our knowledge of this relatively understudied topic. As the need for plasma-derived medicinal products will increase, more scholarly attention should be paid to the social practices and institutional frameworks around plasma donation as well.

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