## Narrative Time and the Thyroid: Hormone Secretions and Storytelling in Italo Svevo's "Doctor Menghi's Drug"

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## Abstract

In the wake of fin-de-siècle discoveries in the field of endocrinology, bodily glands and the hormones they produced featured prominently in the literary works, visual arts, and popular culture of early twentieth-century Europe. Experimental surgery promised rejuvenation and intellectual vitality through gland transplantation and grafting, while phenomena of all sorts began to be associated to hormone production in causal links—from bodily rhythms to behavioral patterns, from the pace of history to the trajectory of nations. Italo Svevo was fascinated by Basedow and Graves's discoveries on the thyroid, a gland that was supposed to determine the speed and promptness of one's body according to the amount of hormones it produced—hypothyroidism, or scarcity of hormones, would entail lethargic behavior and slow movements, while hyperthyroidism, or the abundant production of hormones, would lead to excessive activity and consumption. Through the analysis of an early short story by Svevo, "Doctor Menghi's Drug" (ca. 1904), this paper addresses how the activity of the thyroid affects not only bodily rhythms, but also narrative time—intended as both the time of the story (diegetic time) and the pace of storytelling—and it explores how metabolic processes act as constraints for literary creativity by complicating narrative time and raising questions of narrative agency.

## Keywords

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Bodily organs and storytelling have been deeply connected since ancient times, when divination rituals had animal intestines reveal how the future would unfold to those who could interpret their configurations and decipher their signs. The tradition of bodily parts being personified and endowed with agency in their fierce competition for supremacy over the body-state is quite long and rich, too, as one can see from allegorical texts of political philosophy since antiquity and throughout the Middle Ages and the Renaissance. A passage from Livy's *Ab Urbe condita [Since the City's Founding]* (27-9 BC) reads as follows:

Placuit igitur oratorem ad plebem mitti Menenium Agrippam, facundum virum et quod inde oriundus erat plebi carum. Is intromissus in castra prisco illo dicendi et horrido modo nihil aliud quam hoc narrasse fertur: tempore quo in homine non, ut nunc, omnia in unum consentiant, sed singulis membris suum cuique consilium, suus sermo fuerit, indignatas reliquas partes sua cura, suo labore ac ministerio ventri omnia quaeri, ventrem in medio quietum nihil aliud quam datis voluptatibus frui; conspirasse inde ne manus ad os cibum ferrent, nec os acciperet datum, nec dentes quae acciperent conficerent. Hac ira, dum ventrem fame domare vellent, ipsa una membra totumque corpus ad extremam tabem venisse. Inde apparuisse ventris quoque haud segne ministerium esse, nec magis ali quam alere eum, reddentem in omnes corporis partes hunc quo vivimus vigemusque, divisum pariter in venas, maturum confecto cibo sanguinem. Comparando hinc quam intestina corporis seditio similis esset irae plebis in patres, flexisse mentes hominum. (2.32)

They therefore decided to send as an ambassador to the commons Menenius Agrippa, an eloquent man and dear to the plebeians as being one of themselves by birth. On being admitted to the camp he is said merely to have related the following apologue, in the quaint and uncouth style of that age: In the days when man's members did not all agree amongst themselves, as is now the case, but had each its own ideas and a voice of its own, the other parts thought it unfair that they should have the worry and the trouble and the labour of providing everything for the belly, while the belly remained quietly in their midst with nothing to do but to enjoy the good things which they bestowed upon it; they therefore conspired together that the hands should carry no food to the mouth, nor the mouth accept anything that was given it, nor the teeth grind up what they received. While they sought in this angry spirit to starve the belly into submission, the members themselves and the whole body were reduced to the utmost weakness. Hence it had become clear that even the belly had no idle task to perform, and was no more nourished than it nourished the rest, by giving out to all parts of the body that by which we live and thrive, when it has been divided equally amongst the veins and is enriched with digested food -- that is, the blood. Drawing a parallel from this to show how like was the internal dissension of the bodily members to the anger of the plebs against the Fathers [= the senatorial class], he prevailed upon the minds of his hearers.1

Metabolism and the notion of time have been tied together for numerous centuries as well—the ancient Greek god Chronos was believed to eat his children, which seems to suggest that living in time entails being eaten, processed, and expelled by it, in a metabolic fashion. In this essay I aim to show how one specific bodily gland, the thyroid, and its activities complicate our established notions of narrative time and agency, and I will do so by analyzing a lesser-known text from the early twentieth century, Italo Svevo's short story "Lo specifico del dottor Menghi"<sup>2</sup> ["Doctor Menghi's Drug"] (ca. 1904) within the context of experimental surgery and early endocrinology.

The function of glands in the human body had been recognized as crucial well before the *fin de siècle*—Descartes had famously designated the pineal gland as the seat of the soul as early as his *Traité de l'homme* [*Treatise of Man*] (1633) and *Les Passions de l'âme* [*Passions of the Soul*] (1649). However, the decades between the late nineteenth and the early twentieth century were marked by major medical discoveries that drew unprecedented scholarly attention to the endocrine system, and in the early 1900s the field of endocrinology was founded.<sup>3</sup> At the turn of the century it was found that some bodily glands, including the thyroid, the hypophysis, the suprarenal glands and the gonads, do not yield their secretions

<sup>&</sup>lt;sup>1</sup> Livius, *Ab Urbe Condita*, 2.32. English edition and translation: B.O. Foster, *Livy. History of Rome*, Vol. 1, Books 1-2, Cambridge MA - London, 1919.

<sup>&</sup>lt;sup>2</sup> The Italian word 'specifico', no longer used in this meaning, used to indicate a drug that was specifically prepared to cure a definite ailment—what today we would define a 'narrow-spectrum pharmaceutical'. <sup>3</sup> My sources for this excursus are: Victor Cornelius Medvei, *A History of Endocrinology* (Lancaster: MTP Press, 1982) and Thomas Schlich, *The Origins of Organ Transplantation: Surgery and Laboratory Science 1880-1930* (Rochester, NY: The University of Rochester Press, 2010).

into other organs through a duct, but they release instead their chemical messengers directly into the blood. Such glands were named 'endocrine', a twentieth-century neologism formed by the ancient Greek prefix  $\dot{\epsilon}v\delta o$ -, 'inside' (vs  $\dot{\epsilon}\xi \omega$ -, 'outer') and the verb  $\kappa\rho iv\epsilon v$ , 'to separate', 'to distinguish');<sup>4</sup> the word 'hormone' instead was coined in 1905 by Ernest Starling, who modeled it on another ancient Greek term,  $\dot{o}\rho\mu\eta$ , meaning 'impetus', 'onrush', to emphasize the crucial role of these chemical secretions in all life functions. By the early 1900s the medical community recognized the complex regulatory mechanism within this glandular system, and by the 1930s the concept of an 'endocrine orchestra' emerged.

As we turn specifically to the thyroid, it is worth mentioning that in the 1840s and 1850s two surgeons, Carl Adolph von Basedow (1799-1854) in Germany and Robert James Graves (1797-1853) in Ireland, independently discovered that when the gland produces an excessive amount of secretions, this determines an effect of destruction, consumption, and excessive metabolic activity. The most common symptoms of this syndrome, called the Basedow-Graves disease or hyperthyroidism, are an increased heart rate, bulging eyes, and goiter. Conversely, insufficient thyroid activity (hypothyroidism) entails slow processes and slow reactions to stimuli. Basedow and Graves's theories seeped into popular culture by the turn of the century, when other major discoveries in the field were made.<sup>5</sup> The thyroid derives its name from its shape and function—the Greek θυρεωειδής stands for 'shield-like' or 'shield-shaped'6—and today we know that thyroid hormones regulate kidney activity, cardiac output, respiratory ventilation, the breakdown of fats, proteins, and carbohydrates, besides influencing thermoregulation.

At the turn of the century endocrinology was in a most active stage of development, as if itself influenced by a growth hormone, and was receiving most valuable help from organic chemists, who were devoting much time and efforts to elucidating the structure and synthesis of hormones (adrenaline and testosterone were isolated right around that time). The first three decades of the twentieth century arguably represent a golden age in endocrinology yet for another reason—the flowering of experimental surgery. In the 1890s Charles Eduard Brown-Séquard had begun grafting animal glands and tissue, and injecting animal organ extracts into the human body (especially thyroids from monkeys) with therapeutic purposes. Brown-Séquard paved the way for the work of two pioneer surgeons in organ-therapy for rejuvenation—Serge Voronoff, (1866-1951), a French physician of Russian descent, on whom Mikhail Bulgakov likely modeled his Professor Preobrazhenskii in *The Heart of A Dog*, and Eugen Steinach (1861-1944), an Austrian physiologist. By the 1920s the two surgeons became by far the most famous and the most sought after in Europe: they would implant glands sourced from chimpanzees and guinea pigs—mostly testicles

<sup>4</sup> At that time it was already known that some bodily glands have a double function: they excrete chemical substances into other organs through special ducts (as the pancreas does into the intestine) and at the same time they have islands or groups of different cells that produce special chemical messengers (such as insulin) and discharge them directly into the blood. The expression 'internal secretion' had first employed by Claude Bernard in an 1855 lecture. Bernard mentioned that the liver yields an external secretion in the form of bile and also an internal one of sugar, which passes directly into the general circulation.

<sup>5</sup> Among turn-of-the-century discoveries related to the thyroid, its structure, and its activity, let us mention that the thyroxine and iodine were proven by German chemist Eugen Baumann (1846-1896) to be active components in the gland.

<sup>6</sup> For detailed etymological information on the thyroid and other endocrine glands, see *Onomatologia Anatomica. Geschichte und Kritik der anatomischen Sprache der Gegenwart*, ed. by Joseph Hyrtl, Vienna: Wilhelm Braumüller und Universitätsbuchhändler, 1880.

but not exclusively—under the skin of humans with the goal of obtaining mental and physical rejuvenation through an overproduction of testosterone.<sup>7</sup> A popular documentary, *Der Steinach-Film* (1922), showed these operations with a purpose that was both educational and promotional of Steinach's technique. In a way, to late nineteenth-century 'degeneration' as both a biological and literary-aesthetic concept, early twentieth-century culture responded with 'regeneration'—surgeons were claiming to revert the biological time of the body and rewind its clock. Such operations were very popular, and William Butler Yeats famously underwent one of them in 1933.

The Triestine writer Italo Svevo (a pseudonym of Aron Hector Schmitz, 1861-1928) was fascinated by the recent findings in the field of endocrinology, while he looked at rejuvenation operations and their popularity with skepticism and amusement, and wrote several short satirical and tongue-in-cheek articles on the topic in local newspapers.<sup>8</sup> Aside from the rejuvenation craze and the rush to animal glands, a topic that Svevo would touch upon in a later play titled La rigenerazione [Regeneration] (most probably written in 1926), as well as in his last work, left unfinished, Continuations (Continuazioni, 1928), what fascinated him immensely were Basedow's discoveries on the thyroid as a mitigating organ that influences the individual's inner pace and rhythm, one's promptness and vitality. Svevo incorporated this principle in his writings at the levels of rhetoric and style. In his main and best-known novel, Zeno's Conscience (La coscienza di Zeno, 1923), a first-person memoir written by the main character, Zeno Cosini, for his psychoanalyst, doctor S., we find several references to Basedow's discoveries about the thyroid's cycles. One of the characters, Ada, whom Zeno secretly loves, unrequited, and whose sister Augusta he has married instead, is diagnosed with hyper-thyroidism. This allows Zeno to postulate that the abundance or paucity of hormones that human thyroids produce does not limit its influence to the strictly physiological rhythms of individuals, their perceptions of time, speed of action and general vivacity, but it goes as far as dictating the course and pace of history's turns and the trajectories of nations.

Basedow's is a great, significant disease! ... All organisms extend along a line. At one end is Basedow's disease, which implies the generous, mad consumption of vital force at a precipitous pace, the pounding of an uncurbed heart. At the other end are the organisms depressed through organic avarice, destined to die of a disease that would appear to be exhaustion but which is, on the contrary, sloth. The golden mean between the two diseases is found in the center and is improperly defined as health, which is only a way station. ... Society proceeds because the Basedowians push it, and it doesn't crash because the others hold it back. I am convinced that anyone wishing to construct a society could do so more simply, but this is the way it's been made, with goiter at one end and edema at the other, and there's no help for it. In the middle are those who have either incipient goiter or incipient edema, and along the entire line, in all mankind, absolute health is missing. (316)

Grande, importante malattia quella di Basedow! ... tutti gli organismi si distribuiscono su una linea, ad un capo della quale sta la malattia di Basedow che implica il generosissimo, folle consumo della forza vitale ad un ritmo precipitoso, il battito di un cuore sfrenato, e

<sup>7</sup> It was only after the 1930s that synthetized hormones replaced transplants of whole glands (such as the spleen, and of course, the theyoid and the pituitary) for therapeutic purposes.
<sup>8</sup> On Svevo's self-positioning vis-à-vis these new techniques, see *Guarire dalla cura: Italo Svevo e i medici*, ed. Riccardo Cepach (Trieste: Comune di Trieste, Museo Sveviano, 2008).

all'altro stanno gli organismi immiseriti per avarizia organica, destinati a perire di una malattia che sembrerebbe di esaurimento ed è invece di poltronaggine. Il giusto medio fra le due malattie si trova al centro e viene designato impropriamente come la salute che non è che una sosta.... La società procede perché i Basedowiani la sospingono, e non precipita perché gli altri la trattengono. Io sono convinto che volendo costruire una società, si poteva farlo più semplicemente, ma è fatta così, col gozzo ad uno dei suoi capi e l'edema all'altro, e non c'è rimedio. In mezzo stanno coloro che hanno incipiente o gozzo o edema e su tutta la linea, in tutta l'umanità, la salute assoluta manca.<sup>9</sup> (353-4)

We must note that although Ada is diagnosed with hyperthyroidism, it is Zeno himself who behaves as if his thyroid were engaged in an over-production of hormones: he is constantly running—hurrying to his father's deathbed, only to receive a slap in the face from him; rushing to the rescue of his brother-in-law's business and running across the city to arrive at his funeral in time—mostly failing in achieving his supposed goals, and constantly escaping from what he calls "the poisons of life," which come from within and without his body, by running faster than them.

You have to keep moving. Life has poisons, but also some other poisons that serve as antidotes. Only by running can you elude the former and take advantage of the latter (317)

Bisogna moversi. La vita ha dei veleni, ma poi anche degli altri veleni che servono di contravveleni. Solo correndo si può sottrarsi ai primi e giovarsi degli altri. (354)

Zeno himself acknowledges that his life rhythms can be explained by Basedow's laws. He is running on a metabolic wave in order to expel toxins and excess hormones and stay alive, but with fluctuating success.

Svevo scholars have extensively explored the tension between health and sickness in this novel within the frame of psychoanalytic literary theory.<sup>10</sup> What interests me here, instead, is the role of the thyroid as *agent*, and if we look at Svevo's literary production, glands and hormones feature most prominently<sup>11</sup> in a much earlier text, a short story that was written in his "periodo del silenzio," a long hiatus between his second novel, *Senilità* [*As A Man Grows Old*] (1898) and the third one, *Zeno's Conscience*, and that precedes the latter by twenty years. The story is entitled "Doctor Menghi's drug" ["Lo specifico del

<sup>&</sup>lt;sup>9</sup> I am quoting, respectively, from Italo Svevo, Zeno's Conscience, trans. by W. Weaver (New York: Vintage Books, 2003); and Id., La coscienza di Zeno (Milano: Dall'Oglio, 1966).

<sup>&</sup>lt;sup>10</sup> Among the most prominent studies within this trend rank the works of Mario Lavagetto (see *L'impie-gato Schmitz e altri saggi su Svevo*, 1975, and also his introduction to the prestigious Meridiani edition of Svevo's work, 2004), Teresa de Lauretis (*La sintassi del desiderio. Struttura e forme del romanzo sveviano*, 1976), and Mario Fusco (*Italo Svevo. Conscience et réalité*, 1973).

<sup>&</sup>lt;sup>11</sup> When considering the role of the thyroid in Svevo's literary production, the question arises as to whether and to what extent the Triestine writer and James Joyce had discussed the poetics of bodily organs. In Joyce's informal description of the chapters of his *Ulysses* he would have each of them governed by a bodily organ (for instance, the kidneys inform the first one). Joyce and Svevo famously met in Trieste in 1907, when the former became the latter's English teacher and helped him promote his literary works in European intellectual circles. We know from Svevo's letters that Joyce was familiar with a few of the short stories that he wrote during his "periodo del silenzio," including "Ombre notturne / Vino generoso," which according to Svevo Joyce read in 1914. Svevo claims so in a letter to Benjamin Crémieux from March 15th, 1927. See I. Svevo, *Carteggio con James Joyce, Eugenio Montale, Valery Larbaud, Benjamin Crémieux, Marie Anne Comnène, Valerio Jabier*, ed. by B. Maier (Milano: Dall'Oglio, 1965), 85. However, it is not clear whether Joyce read "Doctor Menghi's Drug" as well.

dottor Menghi"], it was most probably written in 1904, but it was only published posthumously, in 1954, along with other archival materials.<sup>12</sup> In "Doctor Menghi's Drug" Svevo articulated and rehearsed in greater detail precisely that aesthetic question around time, agency, and thyroid hormones that he would formulate in a more distilled fashion two decades later in his masterpiece. The main character is Doctor Menghi, an experimental endocrinologist, and the story is his first-person account on his pharmacological discoveries and experiments, a text that is read posthumously, as per his will, during a meeting of the Medical Society.

Menghi extracts a hormone produced by the gland of a secret animal, the longest-living on earth, and he interestingly defines that gland a "mitigating organ," an attribute often used to describe the thyroid in medical literature.<sup>13</sup> First he implants the gland in a rabbit, and then extracts a serum that is ready for use in humans. Menghi calls this newly produced hormone Annina—he names it after his mother, Anna—and it is probably not by chance that the name "Annina" rhymes with those of major thyroid hormones that had recently been discovered, 'tiroxina' (thyroxine) and 'tri-iodotironina' (triiodothyronine), which today we call T3 and T4. Menghi's goal is to create a hormone-based drug that will enrich the hormonal endowment of the human thyroid and will deeply influence metabolic rhythms as well as the subject's perception of time, and consequently people's vitality and promptness to action. He is convinced that an excess of vivacity and emotions should be avoided as it makes people burn out fast, besides creating problems in society and history-irrational moves, wars-and that an additional mitigating agent is needed between the individual and the world. This mitigating agent will make people's lives longer and will allow for a gradual and controlled dispersion of one's energies over the years, without sudden emotional peaks or intensity of feelings. The condition Menghi aims for is what he defines "economy of life" (economia vitale). Fascinated by Napoleon, "whose heart beat in synch with the clock," Menghi aims for this ratio with his serum. Unlike fashionable operations, this newly created drug will not rejuvenate people, an effect Menghi had tried to pursue with a former mixture he had created, the "Menghi alcohol" (alcole Menghi). Instead, Annina will slow down bodily functions and metabolic rhythms. Once the drug that will change the world is ready, Menghi tests it on himself; in his account we read how the experiment unfolds and we learn about his findings. The doctor does not write his notes for an audience, and it is only upon dying that he decides to share them with the scientific community in order to warn them against such a direction in endocrinology. As he describes how his body reacts to the introduction of a new hormone, Menghi is both the author and the hero of his text, which is read aloud for us audience by the doctors of the Medical Society.

June 2nd, 10:15 a.m. – The injection has been made. An absolute calm reigns in my organism. My pulse is 84, clearly ... The serum is being absorbed slowly ...

10:35 a.m. Underneath the skin there's no residual serum left. My temperature is 98.9 ... I can measure the heartbeat with my ear pressed against the pillow and I end up determining that it is in sync with the pulse.

2 giugno ore 10 ¼. L'iniezione è stata fatta. Una calma assoluta è nel mio organismo. Il mio polso è di 84 e si capisce ... L'assorbimento del siero procede lentamente...

<sup>12</sup> Svevo's short story appeared in print for the first time in Italo Svevo, *Saggi e pagine sparse*, edited by Umbro Apollonio (Milano: Mondadori, 1954). The autograph is located in the Svevo Museum by the Hortis library in Trieste.

<sup>13</sup> See Medvei, A History of Endocrinology, 219.

Ore 10 e 35 m. Sotto la cute non c'è più alcun residuo di siero. La mia temperatura è 37 e 2. ... Posso contare il battito del cuore nell'orecchio poggiato sul guanciale e arrivo a stabilire ch'è sincrono al polso. (44-5)

During the first forty-five minutes, Menghi offers an inchworm commentary of what is happening to him, but soon afterwards we learn that he is not feeling well. The next entry is from the next morning, when he relates the violent fever he had during the night as the Annina was kicking in. From the style of these new entries the doctor and the readers understand that something has changed in his body as well as in his writing. While on the previous day Menghi could keep the reins of the narrative firmly in hand, serving as both the observer and the observed, as both the narrator and the main character, by the morning his heart rate, breathing, and bodily functions slow down, and so does the rhythm of his narration:

June 3rd, 9 a.m. The pulse ... is now 66 - 18 fewer pulsations than last night. ... The room appeared to me totally dark; only a little yellow square was hitting my retina, the gas flame ... cold and little, my only contact with the external world. ... Over there my legs, that appeared far away, well beyond the bed, felt enormously heavy. ... I didn't hear my breathing, nor did I feel my heart beating.

3 giugno ore 9 ant. ... il polso ... ora ammonta a 66; 18 pulsazioni meno di iersera.

... La stanza m'appariva buia del tutto; sulla mia retina si rifletteva solo una piastrina gialla, la fiamma del gas ... fredda e piccola, l'unico mio contatto con il mondo esterno. ... Laggiù, le mie gambe che mi parevano lontano, ben fuori dal letto, pesavano enormemente. ... Non sentivo né il mio respiro né percepivo il battito del mio cuore. (46-7)

For the sake of comparison, here is Basedow's description of a hypothyroidean patient:

... the whole expression of the face remarkably placid, tissues softened, pronunciation as if the tongue were too large for the mouth ... it is the weakest of all existing living beings . . . this is no more the animated countenance, the proud eye, which reflects its will; it is a dumb face, similar to those old pieces of coin, where continuous use has erased the imprint of the coin-face. (245, 251)

In Menghi's notes the account of what looks like a few minutes takes up six pages. Formal measurements and observations disappear from the doctor's report, and he suddenly realizes that "[t]he brain was less affected by Annina than any other organ" ("il cervello sentiva meno degli altri organi l'effetto dell'Annina," 47). Indeed, Menghi is vigil and lucid, acknowledging the manipulation of time and vitality that Annina is performing in his body: "Fu con isforzo che toccai con una mano i piedi nudi." (48) ("It was with a great effort that I could touch my naked feet with my hand"). However, he cannot set himself to motion.

I thought: I should note down my observations immediately. I was certain I could spring from my bed and run to write up my notes. But I did not move. My mind was set on the notes and I lingered thinking about what I would write, were I to write something. ... It would have been enough for me to lift my head above the table to see the clock that night but I did not make that effort. I kept lying on my back, glad to see that one of the hopes I had put on Annina was confirmed: I was not rushing to action unbecomingly ... Without the slightest intention of grabbing a pencil with my hand, I analyzed my senses. Pensai: dovrei notare subito le mie osservazioni. Ero certo che avrei potuto balzare dal letto e correre a fare le mie annotazioni. Ma non mi mossi. Il pensiero rimase alle annotazioni e m'indugiai a pensare quello che avrei scritto se avessi scritto. ... Sarebbe bastato che alzassi la testa oltre il tavolo di notte per vedere l'orologio ma io non feci un tale sforzo. Restai supino lieto di veder confermata una delle speranze poste nella mia Annina: Io non correvo disordinatamente all'azione. ... senz'alcun'idea di giungere a prendere la matita in mano analizzai i miei sensi. (48-9)

While Menghi is gladly observing the effect of the hormone, the reader realizes that in fact a whole day has passed, with no other action than Menghi's slow pondering and considering, trapped in a numb, alienated body. Menghi is frozen in time – his brain is functional and registers what is happening, but his vital energy and his grip on his body have eerily disappeared. Since he is not able to continue writing his chronicle of the experiment, we learn about that day's events from his recollections ex post facto.

The sun sets once more, and suddenly, in this unperturbed nocturnal scene suddenly something happens that surprises Menghi and does not depend on his will. Up to that moment he was still considering himself the narrator of the scene, the repository of his will and somebody potentially able to make his body move, although much more slowly than usual, and take the lead of his chronicle of the events. Suddenly it becomes clear to him that an additional narrative voice is emerging from within his body and in spite of him. Menghi vacillates on the threshold between being the narrator and the narratee (as defined by Gerald Prince<sup>14</sup>). He sits back and becomes the audience of Annina's pièce, whose main characters are the doctor himself, a flame and a wardrobe.

The fact that Menghi gives up his note-writing is an additional sign of his authorship being denied or interrupted. As his inner time gets slower, Menghi slips away from authorship and Annina takes the scene: the hormone is now circulating at full steam in his body and taking over the management of the narrative frame.

The effort caused by perceiving an object was largely rewarded by the acuteness of vision. I could analyze the slightest color nuance. ... Now I could see ... within the flame the most varied gradations of those color tones. *That flame was speaking!* I lifted my neck a bit and stared into the darkness, while I tried to make out the wardrobe, which was supposed to stand beside the mirror. I did not perceive it right away, but **as if per my will** [sic], my sight became more intense, and therefore the object – *as if I had called it – came out of the dark.* (*emphasis mine*)

Lo sforzo che costava la percezione di un oggetto era largamente compensato dalla finezza della visione. Io potevo analizzare la più lieve sfumatura di colore. ... Ora vedevo ... nella fiamma le gradazioni più varie di quei varii toni. Quella fiamma parlava! Rizzai un po' il collo e fissai nell'oscurità tentando di vedere l'armadio che doveva trovarsi accanto allo specchio. Non subito percepii l'oggetto ma *come per mia volontà* [sic] il mio sguardo divenne più intenso, così l'oggetto – come se io l'avessi chiamato – uscì dalla penombra.<sup>15</sup> (50)

'The flame is speaking' and the doctor finally lifts his neck, the first actual movement in twenty-four hours and six pages, as a spectator's response to a show that appeals to his attention and curiosity. Menghi acknowledges a second narrator, whose headquarters are in his body and who is directing the action via the medium of his perceptions, that now

 <sup>&</sup>lt;sup>14</sup> Gerald Prince, "Notes toward a Characterization of Fictional Narratees." *Genre* 4 (1971), 100–05.
 <sup>15</sup> I am quoting from Italo Svevo, *Due racconti* (Milano: Mondadori, 1967). The translation is mine.

interest only his brain, but are much more acute than usual. Soon follows the description of the wardrobe as it comes out on stage, in the gas flame's spotlight:

The wardrobe had an old, sturdy, baroque frame, a bad-quality antique. Its lacquer was worn and on its side there were two pretentious little columns from which grapes were hanging. I had never seen it like that, and since it was an object I had had at home since my childhood, I was appalled to find it so surprisingly strange. ... I was surprised by the precision and fineness of my eye. ... around this present vision coalesced all the visions I had had of that wardrobe since my youth. And I saw it again, always dark and menacing, when it stood in a dimly lit room in our first house in Venice. ... The enormous wardrobe that guarded with utmost seriousness my first tiny clothes. Inside it there was a strong scent of lavender, which Mother liked much. ... I saw it in the outdoors ... looking rougher than usual, with several grapes broken ... yellow wood wounds appeared almost bleeding against the rest of the wardrobe. (*emphasis mine*)

L'armadio era una cassa antica, massiccia, barocca, d'epoca pessima, il suo lustro sbiadito, ai fianchi due colonnine pretensiose dai cui fastigi pendevano dei grappoli d'uva. Io non l'avevo mai visto così ed essendo un oggetto che avevo avuto accanto dalla mia prima infanzia fui stupito di scorgerlo tanto sorprendentemente strano. ... fui sorpreso dalla delica-tezza e finezza del mio occhio. ... nella visione attuale s'addensarono tutte le visioni ch'io di quell'armadio avevo avuto dalla mia prima giovinezza. E lo rividi sempre fosco e oscuro quando abitava una stanza mai rischiarata nella nostra prima abitazione a Venezia ... Mastodontico armadio che ricettava allora serio, serio i miei primi vestitini corti. Dentro c'era un forte odore di lavanda che mamma amava molto. ... Lo vidi all'aperto ..., dall'aspetto più malandato del solito, varie uve spezzate nei suoi grappoli ... le ferite di legno giallo apparivano allora in confronto dell'armadio quasi sanguinanti (51-2)

With the wardrobe scene of Annina's pièce Menghi experiences yet another manipulation of time, a collapsing of distinct moments - past and recent perceptions of that same object are evoked and they all pile up and crystalize in the present experience of seeing the wardrobe as characterized by the hormone Annina. He sees it and contemporarily also re-sees it ("lo rividi"). The emphasis on vision gestures to the experience of a spectacle, of a performance. Objects interact among themselves independently of Menghi: under the direction of Annina the flame animates and illuminates the wardrobe, which in turn takes on a life that is a projection of the doctor's past and present perceptions. In his Reassembling the Social: An Introduction to Actor-Network Theory, Bruno Latour argues that the social-a concept that he re-defines-is best understood as an impure and ever-shifting assemblage of humans and non-humans.<sup>16</sup> In this scene the flame itself is almost a Latourian quasi-object or quasi-subject in its weaving a network between different things or actants - Menghi and the wardrobe, most notably - whereby their reciprocal status of subjects vs objects is defined contingently on the basis of their momentary relationships that must be traced before they can be understood. Another voice within the field of object-oriented ontology that may illuminate this passage in our text is Donna Haraway's. In her discussion of the cyborg, "a hybrid of machine and organism," (149) she claims that:

Late twentieth-century machines have made thoroughly ambiguous the difference between natural and artificial, mind and body, self-developing and externally designed, and many

<sup>16</sup> Bruno Latour, Reassembling the Social: An Introduction to Actor-Network Theory (Oxford: Oxford University Press, 2005), 1–17.

other distinctions that used to apply to organisms and machines. Our machines are disturbingly lively, and we ourselves frighteningly inert.<sup>17</sup> (152)

Although the thyroid's hormones are not machines, Donna Haraway's cyborg theories about alien objects and their agency seem to apply fruitfully here. Her last sentence in the quoted passage, especially, offers quite an accurate description of what is happening in our text.

The sun rises again and is presented as an additional character of Annina's story:

Meanwhile the sun was rising. The window of the wall that was the farthest from me came alive and showed up, at first discrete, as if knocking to be allowed in. Soon it became the most prominent thing in the room.

Intanto venne l'alba. La finestra ch'era posta alla parete più lontana da me si fece viva, dapprima discreta, come se bussasse per poter entrare. Presto divenne la cosa più importante della stanza. (52)

The sunrise serves the purpose of a stage light that determines the transition to a different scene. Indeed, Annina's story at this point features a change of register and focus, with a meta-gesture. Menghi cannot sleep, and his brain keeps working and creating, but what does it create?

... future experiments that I have to carry out. First I had to see whether Annina would accumulate within the human organism. ... Then I had to investigate if and how our organism could develop tolerance or addiction to Annina.

... i futuri esperimenti ch'io dovevo fare. Dapprima dovevo vedere se l'Annina nel nostro organismo si sommasse ... Poi dovevo indagare se usando il nostro organismo all'Annina risultasse un'abitudine. (53)

One could read this passage as Annina's attempt to divine her own fate within the scientific field and the pharmaceutical market. Is she going to become a star drug and widely employed? Is she going to be trashed? She is pushing Menghi to find answers to these questions.

By manipulating Menghi's bodily functions and disrupting his hormonal balance, Annina steps up to the role of co-narrator in the doctor's notes. However, this peculiar role of the Annina hormone is not limited to a few episodes, but it ends up affecting the general plot of the text. As the effect of the drug wanes, Menghi learns that while he was lying in bed motionless and slowed down by Annina, his colleagues were trying to contact him and tell him that his mother had had a heart attack. Menghi's perceptions were then so strictly channeled and his energies carefully economized that he did not notice his friends' attempts and he failed to run to his mother's rescue. Now the old lady has little hope to survive and Menghi decides to administer Annina to her, too—he is worried that sparkling vitality may further harm her feeble heart. While his mother is on Annina, Menghi can witness from an external perspective to the same stages he has himself gone through. She, too, freezes and does not seem to react to people's words or stimuli. In the meantime, the

<sup>&</sup>lt;sup>17</sup> Donna Haraway, "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century," in *Simians, Cyborgs and Women: The Reinvention of Nature* (New York: Routledge, 1991), 149-181.

effect of Annina on Menghi has completely worn off and as a reaction his body experiences an excess of vivacity, which concerns the doctor – his mother, too, will experience this belated exuberance and her heart will not be able to bear it. Sure enough, when the old woman wakes up from the semi-hibernation that Annina caused, she confirms having had a similar experience to her son's, and she reports it with unusual animation:

How could you conceive such a horrible thing? You buried me alive, you! ... I wanted, I wanted to move, to scream, yet I could not and everything was dead inside of me but the desire to live, scream, move ... buried alive ... You thought you were serving everybody's well-being; instead your invention is nothing but a new plague. Oh! Poor thing! How are you going to console yourself now that you are losing your mother and years of work at the same time?

Come hai potuto immaginare una cosa tanto orribile? M'hai sepolta viva, tu! ... io volevo, io volevo movermi, gridare, e non potevo e tutto era morto in me fuori che il desiderio di vivere, gridare, movermi... sepolta viva... Tu hai pensato di fare il bene di tutti e invece la tua invenzione non è altro che un nuovo flagello. Oh! Poverino! Come potrai ora consolarti di perdere nello stesso tempo tua madre e il tuo grande lavoro? (73)

The reduced vitality caused by Annina slows narrative time, as we have seen with Menghi's experiment notes. Conversely, an excess of vitality translates into impassioned utterances and a faster-paced account on events. Under this counter-effect to Annina, the character's bodily function speed up, so does her talking, and so do the prose rhythm and the plot: within half a page the old mother wakes up, describes to Menghi her experience in shock, has him promise that he will discard Annina, and dies immediately.

Menghi is confronted with the shortcomings of his newly-fashioned hormone. Not only does he notice that when its effect is over, the exuberance so long withheld explodes at once and may be lethal, but he also realizes that a surplus of vitality in one's body is fundamental to defeat infections or to recover from illness. Resilience would be annihilated by the effect of Annina.

The additional, consistent, and independent narrative voice that Annina provides throughout the text, once injected in Menghi's body, is also reminiscent of narratives of the split self in the personified dialectics, or inner dialogism, that we call schizophrenia. However, while diseases and their demons are often intangible and not clearly localized, here this alien presence inside the subject is real, it occupies physical space and bears a name: we are talking about the biological functions of the thyroid, or its fictional equivalent, the specific mixture of hormones it produces and their dosage.

In Svevo's text we encounter an alien being that dwells within an organism and temporarily takes the lead of bodily functions as well as of the plot. Thyroid hormones influence narrative time as much as they raise questions of agency. Closely related to these two elements is the issue of parenthood at which this short story hints. Menghi's drug is his one brainchild, after previous unsuccessful attempts, and it is not by chance that he names it Annina, according to an old Italian tradition of naming one's children after one's parents. Moreover, Menghi's being a doctor in itself makes him even more a paternal figure, as it confers him special authority even over his own parent, on whose life or death he has the final word when he decides what treatment she should receive. Menghi's story being told as per his will certainly adds to this poetics of lineage and heritage, two concepts that in the story ought to be considered in their sheer biological meaning as well as in terms of scholarly progeny.

Before I come to my conclusions, it will be worthwhile to make a brief incursion into the medical field in order to foreground a phenomenon that is relevant to the present analysis from a structural standpoint. Over the past twenty years, the challenge to agency, authorship, and authority that alien entities within the body pose has emerged quite insistently in the medical field, with prosthetic components and human-made devices increasingly becoming parts of our organisms. Among them is the internal cardiac defibrillator, a device that intervenes when the heartbeat wanes and restarts it with an electric discharge. From a narratological perspective, when our life story is about to end, the device comes in and, regardless of our will, it grants it an epilogue, or a few extra chapters. Although the internal cardiac defibrillator appeared much later than the text we have just analyzed, structurally it serves a comparable function to that of the thyroid in Svevo's text, since it prompts us to rethink time and agency in the unfolding of a specific story, that is one's life trajectory. The work of medical anthropologist Anne Pollock and her interviews with cardiac surgery patients provide examples that are particularly relevant to our discussion:

A 42-year-old worker from the Rust Belt, Stan received his ICD when he passed out while running. Now he considers that the death he almost had would have been an "easy death." "Like blacking out on the road, dying like that would be nothing. There would be no pain whatsoever …" The ICD spared him that "easy death". … Stan feels that the ICD has allowed him to make a trade-off. He gets, and is grateful for, the extra time: "I don't want to die tomorrow." But he has lost the easy death. His greatest fear is that he will receive multiple shocks from his ICD and then die.<sup>18</sup>

Regardless of the patient, of the subject, the internal cardiac defibrillator becomes a *deus ex machina* that activates and determines that the story is not over just yet and it should instead continue further. However, the transition to this newly acquired phase of one's life is not seamless: unlike Menghi, who gladly acknowledges the effect of the hormone Annina, cardiac surgery patients experience a caesura and a shock that they describe as painful, frightening and uncanny. Having an ICD, "a foreign thing" in one's body, as other patients interviewed by Pollock define it, brings death, or the ending, into a new focus: while a sense of closure still informs the general teleology of one's life-trajectory, time horizon becomes an uncomfortably flickering concept.

As I hope to have shown, by pushing metabolic activity to the foreground, with bodily functions informing its style and structure, "Doctor Menghi's Drug" prompts us to rethink our established notions of narrative time and agency. Glands and their secretions propel the plot and therefore operate on a structural level as if they were fully developed characters, in competition with him who was supposed to be the protagonist of the story-world at the onset. Annina's co-authorship of the doctor's notes operates on a structural level (it determines how the story unfolds, it manipulates narrative time) as well as on the level of style: the hormone inhabits Menghi's narration and modulates it to its will, which generates a ventriloquism of sorts. On a textual level, Annina competes with another intra-diegetic narrator, Menghi himself. Moreover, as we have learned from the doctor's but also from

<sup>18</sup> Anne Pollock, "The Internal Cardiac Defibrillator," in *The Inner History of Devices*, ed. by Sherry Turkle (Cambridge, MA: MIT Press, 2008), 101.

his mother's experience with Annina, the rhythm of the prose gets slower or faster depending on whether hormone levels are increasing or decreasing. Finally, the discussion of relationships and networks among things that are independent of the human will, and the issues of agency and of non-human intervention on narrative time that "Doctor Menghi's Drug" raises bring the text close to patient accounts on the internal cardiac defibrillator, a *deus ex machina* that takes on a life of its own and gives the story a new course, renegotiating the time frame and time horizon of one's life trajectory independently and unexpectedly.

My reading of the Svevo's short story points towards two avenues of inquiry that have been overlooked but are certainly worth pursuing. One of them is phenomenological, while the other is historical-literary. First—do metabolism and hormone secretions have an influence on the outermost narrative frame, the author's? Do they affect the act of writing itself? Do they influence our making sense and re-ordering events and phenomena that surround us into coherent narratives that are in sync with our bodily rhythms? The heartbeat has been often associated with scansion in poetry and with music notation, but a parallel between bodily functions and storytelling deserves a more comprehensive study. Recent works in the phenomenology of reading<sup>19</sup> point to that direction by discussing such elements as the increase of one's heart rate when one reads a horror story, but authorship should also be investigated.

Second—two major characteristics of Modernism and the historical avant-gardes are their emphasis on movement and rhythm and their questioning of narrative authority by a sophisticated employment of perspectives. Metabolism and bodily rhythms need to be more central in this picture. The body in the early twentieth century became exposed to more sensorial stimuli than ever before, because of technology, warfare, and a faster-paced routine, therefore bodily functions and bodily rhythms necessarily played a leading role in how stories were told, both as a response to and as a consequence of such an environment. In other words, I am offering an additional interpretive lens through which to look at that dense time period in literature and the arts, which, no matter how extensively scholars have analyzed it, seems to be lending itself continuously to further exploration.

## Works Cited

- Cepach, Riccardo, ed. *Guarire dalla cura: Italo Svevo e i medici.* Trieste: Comune di Trieste, Museo Sveviano, 2008. Print.
- Haraway, Donna. "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century," in *Simians, Cyborgs and Women: The Reinvention of Nature*. New York: Routledge, 1991. 149-181. Print.

Hyrtl, Joseph, ed. Onomatologia Anatomica. Geschichte und Kritik der anatomischen Sprache der

<sup>19</sup> Here I am referring to the quite vast and heterogeneous body of scholarship, mostly pertaining to the visual and environmental studies, which ranges from studies of sensors to the cognitive approaches of Lev Manovich and Mark Hansen, from new readings of Merleau-Ponty (especially neurophenomenology) to the haptics one finds in the work of Laura Marks. Enthymema has devoted a recent issue to cognitive narratology. See *Cognitive Narratology*, Special Issue of *Enthymema*, 8 (2013), edited by S. Calabrese and S. Ballerio. Gegenwart. Vienna: Wilhelm Braumüller und Universitätsbuchhändler, 1880. Print.

- Latour, Bruno. Reassembling the Social: An Introduction to Actor-Network Theory. Oxford: Oxford University Press, 2005. Print.
- Livius. Ab Urbe Condita, 2.32. English edition and translation: B.O. Foster, Livy. History of Rome, Vol. 1, Books 1-2, Cambridge MA London, 1919. Print.
- Medvei, Victor Cornelius. A History of Endocrinology. Lancaster: MTP Press, 1982. Print.
- Pollock, Anne. "The Internal Cardiac Defibrillator," in *The Inner History of Devices*. Edited by Sherry Turkle. Cambridge, MA: MIT Press, 2008. 98-111. Print.
- Prince, Gerald. "Notes toward a Characterization of Fictional Narratees." *Genre* 4 (1971). 100–05. Print.
- Schlich, Thomas. The Origins of Organ Transplantation: Surgery and Laboratory Science 1880-1930. Rochester, NY: The University of Rochester Press, 2010. Print.
- Svevo, Italo. Zeno's Conscience. Translated by W. Weaver. New York: Vintage Books, 2003. Print.
- ---. Due racconti. Milano: Mondadori, 1967. Print.
- ---. La coscienza di Zeno. Milano: Dall'Oglio, 1966. Print.
- ---. Carteggio con James Joyce, Eugenio Montale, Valery Larbaud, Benjamin Crémieux, Marie Anne Comnène, Valerio Jahier. Edited by B. Maier. Milano: Dall'Oglio, 1965. Print.
- ---. Saggi e pagine sparse. Edited by Umbro Apollonio. Milano: Mondadori, 1954. Print.