Self-Tracking: Ethical Considerations on Transparency and Privacy

Lea Watzinger[1]

[1]IDea_Lab, University of Graz

DOI: 10.3217/978-3-85125-932-2-20

Abstract. This article reflects on self-tracking technologies as practices of individual transparency from an ethical point of view. As a conceptual contribution, it discusses transparency as a norm and democratic promise to the individual and presents an overview of ethical implications of a digitally transparent society and its tools. It discusses the notion of transparency as a powerful normative concept of 21st century digital societies. It goes on to argue that people become transparent on a digital level as practices such as self-tracking make individual transparency become an ideology of digital societies. Digital transparency is a concept directly opposed to that of privacy. From a liberal point of view, individual digital transparency and self-tracking pose a threat to self-determination, autonomy, and privacy, while at the same time promising autonomy. To understand these contradictory conceptual contexts, this paper explains the normative importance privacy holds for democracy and individual autonomy. In order to contain the resulting ethical ambivalences of self-tracking and transparency, this paper finally highlights the importance of special sensitivity and attention to differently distributed vulnerabilities, the need for democratic regulation, and for digital sovereignty in all age groups.

1 Introduction

The covid-19 pandemic has spotlighted the tension between data collection, data protection, and transparency, as debates about Covid apps, contact tracing, or data donations around Europe show (Sweeney, 2020; Simon and Rieder, 2021; Sharon, 2020). Transparency is a central buzzword in these debates, characterizing a prevalent ideology of digital societies (Watzinger, 2022). From a philosophical media ethics perspective, examining and understanding ambivalent concepts like that of transparency is a key goal, which is why this article focusses on the different dimensions of this concept and gives an overview of the ethical challenges connected to individual transparency. It is particularly interested in the transfer of the concept to the individual in the sense of data-induced transparency, which can be understood as an antipode to privacy (Watzinger, 2022; Weidacher, 2019). Individual digital transparency, however, implies a threat to informational self-determination (Lanzing, 2016). Common self-tracking practices show in an exemplary way the extent to which transparency as a concept applied to the individual stands in contrast to privacy. As

privacy is a basis for developing self-determination and autonomy in a democratic society (Rössler, 2001), losing the former affects all citizens and challenges democratic society and its institutions. Nevertheless, not all digital media users may be equally affected by violations of their privacy as potential vulnerabilities are complex and differently distributed, which makes it necessary to adapt ethical considerations accordingly.

2 Transparency as a Keyword of Digital Societies

The term *transparency* seems to be a buzzword of 21st century political and democratic practice (Hood and Heald, 2006; Baumann, 2014) and a requirement in various contexts and disciplines. Transparency is a key concept for democracy theory, but with digital transformation it expands its meaning to include other aspects. Furthermore, it is a term with positive connotations that does not only describe, but also implies evaluation (Weidacher, 2019) – it is a highly normative concept. According to Weidacher (2019), digital societies in the 21st century are characterized by a digital media logic, which means the internet and its social use have shaped communication and human life. This digital transformation is marked both by datafication and the generating, transmitting, and publishing data, as well as by the neutralization of distance and delay that comes with disembodied communication. As a result, it is a common expectation to obtain (almost) any information anytime and anywhere and to be able to share it. Digital transformation fosters practices of transparency which in turn are to a large extent made possible by digital and networked technologies (Weidacher, 2019). Weidacher (2019) shows that as a result, transparency as an ideology forms part of such a digital media logic and digital society. So, as a political concept of 21st century digital societies it addresses not only the state and institutions, but also individuals (Alloa, 2018; Watzinger, 2022). This paper focuses on the transfer of the concept to the individual in the sense of data-induced transparency, which can be understood as the antipode of privacy.

3 Interdisciplinary Dimensions of a Concept

We have seen that transparency and the critical engagement with it are closely related to digital media, datafication, and their social effects. In this section, I show very briefly that transparency is a multidimensional, philosophically relevant concept on three levels: it is normative, it is metaphoric, and it refers to the state as well as to the individual. The normativity of *transparency* becomes evident through its ideological character, the details of which I discussed above. As a 'magical concept' which stands for enlightenment and openness, it points far beyond an institutional context (Alloa, 2018). This multidimensionality and metaphorical aspect of the concept becomes clearer when we take a look at transparency's role in art and architecture theory (Rowe

and Slutzky, 1963; Barnstone, 2003). In architecture, transparency is closely connected to glass as a material that claims to epitomize accessibility and democracy (Barnstone, 2005). In this sense, transparency can be understood as a metaphor of modernity. As such, it has been experiencing great popularity for decades and especially in the 21st century (Alloa, 2016). In a nutshell, the term *transparency* evolves as a material concept in glass architecture, is used as a metaphor for democracy and modernity, and ends up as a concept of the individual (Watzinger, 2022; Weidacher, 2019; Lanzing, 2016).

4 Privacy, Transparency, and Democracy – a Liberal Approach

In the context of digital transformation, societies face individual transparency and an increasing loss of information control which consequently poses obstacles to privacy (Hagendorff, 2017). Individual privacy and transparency, in this context, may be understood as opposing concepts (Watzinger, 2022). Both concepts are equally important for democracy theory: transparency traditionally is a follow-up concept for publicity, which transfers its meaning to apply to the individual – a published individual, so to speak. In contrast, privacy, from a classical liberal philosophy point of view, can be understood as something that opposes publicity and transparency. Rössler (2001; 2017) shows the normative and conceptual links that privacy has with autonomy and individual self-determination. Following her liberal approach, privacy is not a natural sphere, but a result of social norms and negotiation processes. In Rössler's understanding, a sphere is private if a person is able to control access to it. *Sphere* in this context should be conceptualized in a general and figurative sense (Rössler, 2001, p. 23f.). The protection of one's privacy thus means protection against unwanted access by others (Rössler, 2001, p. 23). The philosopher Rössler distinguishes three dimensions of privacy. On a decisional level, a person, in order to form their own opinion and develop their personality, has to be free from interferences regarding their actions as well as their decisions. Here, first, *access* refers metaphorically to the emotional access to a person, that is, whether someone is able to influence another person's convictions, behaviour, and decisions. Second, on a local dimension, *access* refers to who can enter another person's private space, such as their home. Third, also in a figurative sense, *access* has an informational dimension and refers to what someone knows about another person. According to this liberal theoretical conceptualization of privacy as Rössler develops it, dimensions, actions, situations, spaces, or even mental states can be private. If we define privacy like this, it is essential for people to be "let alone" (as Warren and Brandeis (1890) have phrased it), i.e. to be shielded from unwanted access of others to freely develop their personality, to make their own decisions, and to be themselves (Rössler, 2001). In a nutshell, being free of observation and access by others is, from this perspective, the only way to realize individual autonomy, which is the basis of democratic self-determination (Rössler,

2001). Only an intact and protected private sphere allows people to be autonomous, to act freely, to develop their own opinions and self-image, and consequently to participate in a democratic community. The philosophical connection of individual self-determination as a foundation of democratic participation shows the individual as well as the social relevance of privacy. Therefore, the social dimensions and values of privacy should be philosophically emphasized (Rössler and Mokrosinska, 2015) because what is considered private always has social significance. The protection of privacy thus enables the creation of communicative spaces where social contacts can be maintained and opinions can be uttered and reflected, practices which are elementary for the realization of democratic ways of life (Seubert, 2017, p. 126). These underlying theoretical concepts make digital privacy and privacy-invasive digital technologies socially and politically relevant.

5 Individual Transparency through Self-Tracking

Digitally connected, mobile self-tracking-devices like smartphones or wearables are popular as well as ubiquitous and offer a variety of tools for monitoring personal data, behaviour or even mental states. They can help a person to feel better, but may as well cause privacy or wellbeing risks (Herzog and Kellmeyer and Wild, 2021; Lanzing, 2016). To better understand the phenomenon of self-tracking practices, it is important to take a look at the motivation and mechanisms of individual data collection via self-tracking tools, its uses and benefits as well as possible risks. In the end, positive and negative aspects must be weighed against each other. Self-tracking is of major ethical interest (Herzog and Kellmeyer and Wild, 2021, p. 9) because it raises questions of individual transparency and privacy, self-knowledge, self-consciousness, and self-determination. Self-tracking practices, when understood as practices of transparency, are ethically relevant since they affect traditional philosophical concepts of individual freedom, autonomy, and overall, the question of a happy life (Rössler, 2020). Voluntarily used self-tracking technologies individualize transparency. From a philosophical and ethical perspective, the previously described conceptual shift of transparency into an individual norm shows to be a major challenge. Self-tracking can help to improve fitness and health and it can be fun. One motivation may be a desire for datafied self-knowledge based on numbers, as such technologies are supposed to increase information about one's own body or habits (Lanzing, 2016). Another related aspect is self-optimization via increasing a person's efficiency, health, or fitness (Duttweiler and Passoth, 2016). In order to be part of a digital community and to compare with other users, data on physical activity, behaviour, habits, even moods, is tracked and shared with other users via social media. There are apps for lifestyle self-tracking as well as apps that explicitly monitor diseases. Although the latter are (still) used rather rarely (Seifert and Meidert, 2018), it is a growing field and the range of users who use digital data collection to support the treatment of specific diseases is

increasing (Sharon, 2017; Steinert, 2017). Furthermore, elderly people have become an important user group for medical purposes (Caldeira, 2020; Seifert and Meidert, 2018). However, constant comparison, surveillance, and control may also cause mental illnesses, such as depression or addiction (Hussain et al., 2015; Kreitmayr and Cho and Magnus, 2017); having one's attention constantly focussed on such tools, too (Herzog and Kellmeyer and Wild, 2021, p. 12). This makes further critical reflection on such ubiquitous technologies and practices vital.

6 A Privacy Approach to Self-Tracking

As self-tracking apps need large amounts and permanent flows of data (Herzog and Kellmeyer and Wild, 2021), they bear inherent risks of losing control over their collected data and information. Accordingly, self-tracking as a transparency practice challenges informational as well as decisional privacy, both of which are essential for individual autonomy, as I showed earlier (Lanzing 2016; 2019; Rössler 2017). From a media ethics perspective, however, it has to be kept in mind that self-tracking as a lifestyle is a voluntary and deliberate practice. For an ethical evaluation, the fact that its use is voluntary is crucial, as it creates a tension between individual transparency, the surveillance potential of self-tracking, and the voluntariness of such self-disclosure and privacy losses. From a philosophical perspective, the motivation behind self-tracking may be understood as a modern, digital promise of happiness corresponding with a digital media logic and potentially leading to individual quantification and commodification (Rössler, 2020). One ethical question of concern then is, if users know what they are doing and understand potential privacy consequences, which makes digital literacy one of the most important needs of digital societies. Self-tracking can be characterized by datafication, networking, and publication, but also by permanent surveillance (Maschewski and Nosthoff, 2021) as the other side of the coin. This means that digital self-tracking differs from 'classical' analogue recordings such as diaries, as Lanzing (2016) emphasizes, as they record automatically and constantly in order to further process the results and share them with a community, whereas diary writing generally aims for a personal self-reflection process (Lanzing, 2016, p. 11). Locating one's own data in digital communities is central for digital self-tracking; the individual receives feedback as well as evaluation (by others or an AI). Combined with its networking character, self-tracking relies on mechanisms of observation and surveillance – although done voluntarily – and owns the potential to objectify and commodify persons, as their data become mere tradable goods (Rössler 2017; 2020). Consequently, from a privacy perspective, data collection and (even voluntary) digital self-exposure prove highly problematic (Lanzing 2016, p. 10). There is obviously a conceptual tension between the idea that disclosing personal information through self-tracking increases one's autonomy and the idea that informational privacy is a condition for precisely this autonomy, as Lanzing (2016; 2019) points out. Besides its

lifestyle use discussed above, self-tracking is also gaining relevance for serious medical and health purposes (Sharon, 2017), although the difference between hedonistic fitness tracking and medical tracking may not always be clear (Meidert et al., 2018), as it is possible to assume a user's health situation based on their fitness data, and fitness is strongly connected to health. Moreover, social conceptions of health or therapy have constantly been changing. As prevention is gaining more and more importance, making use of such digital health tools can be considered sensible.

7 Vulnerabilities and Self-Tracking

As I have shown above, self-tracking practices are a reality of digital societies and have become part of everyday life. These tools are ethically interesting because different ethical values come into conflict. On the one hand, individuals become digitally transparent through their data, as self-tracking practices are practices of individual transparency, which I have already pointed out; on the other hand, most people use these apps voluntarily. From an ethical perspective, self-tracking is a contradiction in itself: it promises to increase individual self-determination through individual, datafied transparency, but at the same time, such transparency is at odds with the privacy necessary for an autonomous life, as liberal theories propose. An ethics approach attempts to identify benefits, risks, and vulnerabilities. *Vulnerability* has become an important concept in bioethics and in public health management to evaluate and identify health risks (Herzog and Kellmeyer and Wild, 2021, p.12). From a more general philosophical perspective, we as humans are per se vulnerable, but not everyone to the same extent. Herzog et al. (2021) define such persons as vulnerable "who are not in a position to make their own decisions freely (such as prisoners), and who cannot formulate them adequately (such as people with severe dementia)" (p. 13). As they point out, people can be particularly vulnerable due to their situation in life or the context they are in. Vulnerabilities can therefore be dynamic, situational, or relational, i.e., they are not caused by the vulnerable person, but by their circumstances. This focus on the circumstances of life shows the political and social dimension of vulnerabilities (Herzog and Kellmeyer and Wild, 2021, p. 14). What vulnerabilities arise in the case of self-tracking and digital transparency? As I have shown above, digital transparency can go hand in hand with a threat to and loss of privacy that make individuals digitally vulnerable. One important and growing digital user group generally considered vulnerable are seniors (Reidl et al. 2020; Caldeira, 2020) since they bear – on a physical level – a greater risk of illness, as they may suffer chronic diseases and health restrictions more often. Nevertheless, the elderly should not simply be categorized as vulnerable (Bozzaro and Boldt and Schweda, 2018), but recognized as a complex and dynamic social group. For the elderly in particular, self-tracking can hold special potential as the options for its use are numerous and diverse. Tracking tools for seniors are thus a growing field (Vargemidis et al., 2020). Even among senior

users, the applications of self-tracking as a lifestyle prevail, but medical use is gaining importance (Seifert and Meidert, 2018, p. 356f.; Vargemidis et al., 2020). Users monitoring specific diseases and health risks, e.g., cannot simply decide to stop using an app, which may make them more dependent on it. For elderly users, explicitly health-related aspects of self-monitoring and preventive health care seem to be particularly important, whereas the connection to a digital community appears to play a minor role (Seifert and Meidert, 2018, p. 256). The informational dimension of seniors' possibly increased vulnerability refers to the higher sensitiveness of personal health and illness data in comparison to common and voluntary fitness data. Furthermore, the digital and media competences are central and may determine, i.e., if an (elderly) person is capable of deciding whether they should use tracking or not. Thus, one mechanism to reduce concrete vulnerabilities with regard to digital media and its threats to privacy is focusing on informed consent (Herzog and Kellmeyer and Wild, 2021) for all users. Informed consent means ensuring users' digital literacy and sovereignty in all age groups and life situations. In conclusion, the discussed potentials of self-tracking for health and age monitoring should be considered with regard to their ambivalences for differently vulnerable user groups for whom medical use and privacy issues may conflict. The special vulnerability of senior users just shows in a highlighted way the tensions between privacy, digital sovereignty, and transparency. The use of data-processing technologies in the field of self-tracking and medical applications is always associated with risks regarding the protection of extremely sensitive data and thus the privacy of the users. The more vulnerable persons are, and the less capable of protecting or defending themselves against potential risks, the more sensitive their data is.

8 Ethical Conclusion

The supposed promise of self-control and empowerment through self-tracking makes it easy for us to lose sight of the fact that the large amounts of data produced in the process, once they exist, are processed, may be revealed to others, and in consequence may limit users' possibilities of acting independently of others. The mere existence of such enormous flows of data may create potentials of control (Schaupp, 2016). Thus, data protection is an extremely sensitive issue in the use of self-tracking applications – this holds true for all users, but even more so for vulnerable groups. It is a political and societal task to regulate data processing and protection in order to enjoy the potential and benefits of digital applications while minimizing their risks (Herzog and Kellmeyer and Wild, 2021). Overall, from a media ethics perspective, it can be stated that users should be able to control the disclosure of information and retain control over their data on a technical as well as a level of digital literacy no matter their age or life situation. Nevertheless, it is a personal decision of each and every individual whether to engage in self-tracking or not. This voluntariness is very important for an

ethical point of view. The possible benefits provided by self-tracking should therefore be evaluated by individually weighing up personal benefits, risks, and vulnerabilities. Self-tracking applications also have a clear social as well as political dimension and relevant effects on different user groups (Reidl et al., 2020). In this context, some individuals turn out to be more vulnerable than others. The potentials and risks must therefore be politically regulated to avoid perpetuating or reinforcing existing vulnerabilities and inequalities or even creating new ones. The fundamental threat to and dissolution of privacy affects all users, but some even more than others. For this reason, it is important to keep in mind these special needs for the designing of apps as well as for business models and political regulation, and to take the living and communication situation of all persons into account (Herzog and Kellmeyer and Wild, 2021; Reidl et al., 2020). Approaches that lead to privacy by design could be pushed and promoted on a political level to enable users to ensure their data protection. Furthermore, users of all ages and life circumstances should be digitally sovereign to trade potentials and perils and they need to be able to rely on regulated, safe infrastructures (Sharon, 2021). This requires not only secure data protection, but also the digital competence of the users. A critical approach and broad digital competencies are needed to realize individual digital sovereignty regardless of age and circumstances.

References

Alloa, E. (2018): Transparency: A Magic Concept of Modernity. In: E. Alloa; D. Thomä (eds.): Transparency, Society and Subjectivity. Critical Perspectives, pp. 21-55.

Alloa, E. (2016): Was kommt, steht im Zeichen der Transparenz. Über Glasarchitektur und das ambivalente Erbe des Modernismus. In: T. Thiel; S. Neuenschwander (eds): Transparenzen/Transparencies. The Ambivalence of a New Visibility, pp. 62-69.

Barnstone, D. A. (2005): The transparent state. Architecture and politics in postwar Germany.

Barnstone, D. A. (2003): Transparency: A Brief Introduction. In: Journal of Architectural Education 56 (4), pp. 2-5.

Baumann, M. (2014): Die schöne Transparenz-Norm und das Biest des Politischen: Paradoxe Folgen einer neuen Ideologie der Öffentlichkeit. In: Leviathan 42 (3) 2014, pp. 398-419.

Bozzaro, C; Boldt, J., Schweda, M. (2018): Are older people a vulnerable group? Philosophical and bioethical perspectives on ageing and vulnerability. In: Bioethics. Special Issue: The Ethics of Ageing 32 (4), pp. 233-239.

Caldeira, C. (2020). Self-tracking technology for senior health: existing practices and unmet needs for wellness, self-management, and recovery. UC Irvine. https://escholarship.org/uc/item/8w7621ks.

Duttweiler, S.; Passoth, J.-H. (2016): Self-Tracking als Optimierungsprojekt? In: J. Strübing et al. (eds.): Leben nach Zahlen. Self-Tracking als Optimierungsprojekt? Bielefeld, pp. 9-44.

Hagendorff, T. (2017): Das Ende der Informationskontrolle. Digitale Mediennutzung jenseits von Privatheit und Datenschutz.

Herzog, L.; Kellmeyer, P.; Wild, V. (2021): Digital behavioral technology, vulnerability and justice: towards an integrated approach. In: Review of Social Economy 80 (1), pp. 7-28.

Hood, C.; Heald, D. (eds.) (2006): Transparency. The key to better governance? Oxford.

Hussain, M., Al-Haiqi, A., Zaidan, A. A., Zaidan, B. B., Kiah, M. L. M., Anuar, N. B., Abdulnabi, M. (2015). The landscape of research on smartphone medical apps: Coherent taxnomy, motivations, open challenges and recommendations. In: Computer Methods and Programs in Biomedicine, Vol 122 (3), pp. 393–408. https://doi.org/10.1016/j.cmpb.2015.08.015.

Kreitmair, K.; Cho, M.; Magnus, D. (2017). Wearable and mobile health technology: Consent and engagement, security, and authentic living. In: Nature Biotechnology, 35 (7), pp. 617–620. https://doi.org/10.1038/nbt.3887.

Lanzing, M. (2019): “Strongly Recommended” Revisiting Decisional Privacy to Judge Hypernudging in Self-Tracking Technologies. In: Philosophy&Technology 32, pp. 549–568. https://doi.org/10.1007/s13347-018-0316-4.

Lanzing, M. (2016): The transparent self. In: Ethics and Information Technology 18 (1) pp. 9-16.

Maschewski, F.; Nosthoff, A. V. (2021): Überwachungskapitalistische Biopolitik: Big Tech und die Regierung der Körper. In: Z Politikwiss 2022 (32), pp. 429-455. https://doi.org/10.1007/s41358-021-00309-9

Meidert U.; Scheermesser, M.; Prieur Y. et al. (2018): Quantified Self – Schnittstelle zwischen Lifestyle und Medizin. https://digitalcollection.zhaw.ch/bitstream/11475/4977/1/3892_Quantified-Self_OA.pdf.

Reidl, S.; Streicher, J.; Hock, M.; Hausner, G.; Waibel, F.; Gürtl, F. (2020): Digitale Ungleichheit. Wie sie entsteht, was sie bewirkt ... und was dagegen hilft. https://www.ffg.at/laura-bassi-4.0-digitalisierung-und-chancengerechtigkeit

Rössler, B. (2020): Fashioning Our Selves? On Understandig and Criticizing the Digitized Society. In: Christ, J. et al. (eds.): Debating critical theory. Engagements with Axel Honneth, pp. 205-223.

Rössler, B. (2017): Autonomie. Ein Versuch über das gelungene Leben.

Rössler, B.; Mokrosinska, D. (eds.) (2015): Social Dimensions of Privacy.

Rössler, B. (2001): Der Wert des Privaten.

Rowe, C.; Slutzky, R. (1963): Transparency: Literal and Phenomenal. In: Perspecta 8, pp. 45–54.

Schaupp, S. (2016): "Wir nennen es flexible Selbstkontrolle." Self-Tracking als Selbsttechnologie des kybernetischen Kapitalismus. In: J. Strübing et al. (eds.): Leben nach Zahlen. Self-Tracking als Optimierungsprojekt? Bielefeld, pp. 63-86.

Seifert, A.; Meidert, U. (2018): Quantified seniors. Technisch unterstützte Selbstvermessung bei älteren Personen. In: Prävention und Gesundheitsförderung 13 (4), pp. 353-360.

Seubert, S. (2017): Das Vermessen kommunikativer Räume. Politische Dimensionen des Privaten und ihre Gefährdungen. In: Forschungsjournal Soziale Bewegungen 30 (2), pp. 124-133.

Sharon, T. (2020): Blind-sided by privacy? Digital contact tracing, the Apple/Google API and big tech's newfound role as global health policy makers. In: Ethics and Information Technology 2021 (23), pp. 45-57.

Sharon, T. (2017): Self-Tracking for Health and the Quantified Self: Re-Articulating Autonomy, Solidarity, and Authenticity in an Age of Personalized Healthcare. Philosophy&Technology 30, pp. 93–121. https://doi.org/10.1007/s13347-016-0215-5.

Simon, J.; Rieder, G. (2021): Trusting the Corona-Warn-App? Contemplations on trust and trustworthiness at the intersection of technology, politics and public debate, In: European Journal of Communication 36 (4), pp. 334-348.

Steinert, A. (2017): Selbstmonitoring als Instrument zur Verbesserung des Gesundheitsverhaltens älterer Menschen. https://refubium.fu-berlin.de/bitstream/handle/fub188/8561/Diss_ASteinert.pdf?%20sequence=1.

Sweeney, Y. (2002): Tracking the debate on COVID-19 surveillance tools. Nature Machine Intelligence 2, pp. 301–304 (2020). https://doi.org/10.1038/s42256-020-0194-1.

Vargemidis, D.; Gerling, K.; Spiel, K.; Vanden Abeele, V.; Geurts, L. (2020): Wearable Physical Activity Tracking Systems for Older Adults — A Systematic Review. In: ACM Trans. Comput. Healthcare 1 (4), pp. 1-37. https://doi.org/10.1145/3402523

Warren, S.; Brandeis, L. (1890): The Right to Privacy. In: Harvard Law Review, 4 (5), pp. 193-220

Watzinger, L. (2022): Transparenz. Herausforderung für Demokratie und Privatheit.

Weidacher, G. (2019): Die Ideologie der Transparenz. Werte- und Bewertungskonflikte im Diskurs über Transparenz, gläserne Menschen und Überwachung vor dem Hintergrund internet-geprägter Lebensformen. In: Steen, P.; Liedtke, F. (eds.): Diskurs der Daten, pp. 97-122.