Édition numérique de documents textuels: vers un modèle d'infrastructure pour la critique textuelle à partir des méthodes, expériences et prototypes développés à l'ILC de Pise

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Samples

<u>Collate/Anastasia</u>, P. Robinson, De Montfort University e University of Saskatchewan;

<u>TUSTEP-TUebingen System of Text Processing Programs</u>, W. Ott, Tuebingen University;

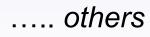
CTE (Classical Text Editor), S. Hagel, Salzburg University;

EDMAC, John Lavagnino, King's College (back-end di CET);

CET (Critical Edition Typesetter);

MauroTex, P.D.Napolitani/P. Mascellani, Pisa University;

EDITE MEDITE, Fenoglio, Lebrave, Ganascia, ITEM.

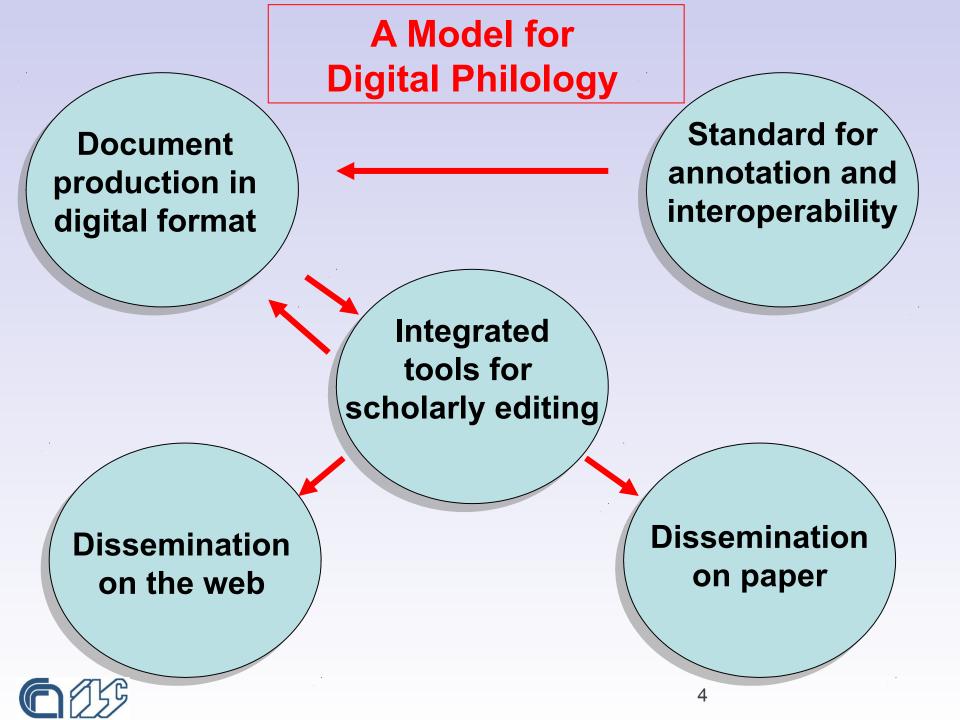




Digital Philology: main elements

- digitisation of primary sources;
- use of metadata and standard text encoding tools also for informations added by automatic, semiautomatic or manual processes;
- production of the scholarly edition;
- dissemination of the edited documents on paper and on the net, with special navigation tools.





Contents of my speech

- Relationship between primary sources and secondary sources (= sources annotaded by different kind of information). This aspect is closely linked to metadata and standards
- Translation of primary sources, which in our model can be considered as a particular form of secondary information
- Digital scholarly editing, that is to say the production of critical editions of digital documents, from ancient to modern ones, especially those transmitted on manuscripts



Not in this speech

- digital scholarly editing of musical sources with a possible correlation between the text (sheet music) and the corresponding audio files;
- publishing and/or annotation of video files. I will only mention briefly these two questions because our flexible model does not exclude to handle this type of file, after the positive experimental test performed few years ago in the field of Clinical Physiology (body images and medical report).



Contents of my speech

- Relationship between primary sources and secondary sources (= sources annotaded by different kind of information). This aspect is closely linked to metadata and standards
- Translation of primary sources, which in our model can be considered as a particular form of secondary information
- Digital scholarly editing with COPhi: production of critical editions of digital documents, from ancient to modern ones, especially those transmitted on manuscripts



Almost two kind of metadata:

- <u>management of the digital document</u> (technical information used for digitisation; eventual enhancement, restauration activity, ...);
- <u>description of the document content(s)</u>.

But which kind of information can be extracted from a digital object of type "text"?

Textual metadata strictly depends from:

- a) the context in which each textual object is placed
- b) the aims of the activities to be carried out with them



Subdivision of the object "text" for the metadata attribution in the philological research:

- extra-textual elements;
- para-textual elements;
- textual properly elements.



1.1 Extra-textual elements:

- page number or manuscript-folia number;
- chapter or paragraph number;
- number of columns, lines, sections, etc.);
- verse number in poetic works;
- other similar notations due to editorial activities;
- current titles in encyclop. or lexicons;
- all elements of the writing surface;

Lib. primus, Tract. primus. 301 in magnam incidet corpus intemperantiam.

omnibus calor naturalis augetur, nec melior At verò æftate,quamquam non melius con-coquat,plus tamen de ficcis humoribus procelebratur concoctio. Refpondetur, quòd fecundum Galenum in commento, 15, Aphor, primæ particulæ, in-telligitur in hominibus habentibus validum calorem: nam in debilibus calor naturalis extinguitur, non roboratur: & dat exemplum exinguitur, non roboraturitse dat exemplium de animalibus etiam quibufdam, quæ tota hyeme dormiunt. Ad quod facit faud facit tur in tertia particula Aphor. 18. Senes æflate melius fe habent : confiftentes verð hyeme. Vbi etiam Galenus cotradicere videtur Hipdocrati dicenti, Senes autumno víque ad ali-quod melius habere. At Galenus dicit omnes ætates male fe habere autumno. Soluitur hoc incidens ex fuperioribus Galeni verbis, quòd ab Hippocrate hoc additum eft, ficut etiam de prima Attace,que quafi verifimilis eft : fic etiam de autumno æftat fimili in priore par-te. Sed redeo ad priorem contradictionem, nam duæ exurgunt diffcultates:Prima,quòd pueri melius vere quàm hyeme fe habent, vt ibi dicitur : non igitur melior concoctio fit hyeme quam vere. Item, quia Galenus in commento 1 tertiæ particulæ dicit, quòd pi-tuitofiores natura melius fe habent æftate quàm hyeme, quia non augetur confimilis humor:contrà biliofiores hyeme. Igitur non fit collatio ad multitudinem caloris , fed ad habitum naturæ. Item videntut humores ex hoc textu temporibus fimiles generari:quod etiam colligitur in libro de Victu priuato-rum,& prima Aphor.2. in commento, & primoctiam de Humana natura. Ad hoc dico, quòd aliud eft comparari corpus quoad ali-mentum folum, nam fic omnia corpora non debilia melius fe habent in hyeme, quia me-lior celebratur concoctio. Poflunt etiam coparari ad immutationem quæ ab aëre continente fits& ad hoc dicit Galenus : Temperatam, feu ad ætatem, feu ad naturam referatur, fimili gaudere: inæqualem autem fua con-traria. Sed & præfenti Aphor. contradicere videtur quod in primo de Victu priuatorum à Galeno feriptum est fectione tertia : Vtendum fore ficcioribus alimentis & calidiori-bus, quafi velit plus eo tempore de pituita gigni. Sed hoc clare in primo de Humana gigin, sea not ciate in pinto ae rimana natura, t. c. 34. & 38. expoluit Hippocrates, volens plus hyene generari de pituita ficur æftate de bile:quam difficultatem videns Gaarbate de bilerguan dificultatem videns Ga-lenus in commento 36. excita contrariesa-tem cum praefenti Aphorifino, foluitque cam duobus modis, imò potus duas tationes ad-ducic, quarum altera ett, quòd hyeme vimure efibis frigidioribus, humidioribus, & duriori-bus i datque exemplan de nouo vimo, tum etiam de rapis, babbis, agninis, ac fuillis car-nibus Altera ett, quòd vel ob ices, aut vefitio penuriam, autincuriam, homo ab exteriori erioras mel'amo delivitore 86 non ladout ra ta

penurian, sutitacuriam, homo ab exteriori frigore perfage leditur; & fi non ledatu, ta-men (dicit) aër attraĉus per ofcula cuis vi-tiar venas : ideóque quantumuis abfoluta in ventricula coĉione (dicit) in liccore leditura. Quid tamen fi quis horarios fruĉus eflatis obiciarit Refondeo breutere Calor naturalis in hyeme melius concoquit, generat tamen humidiores humores, scilicet languinem, & & pituitam : vnde fi frig dioribus alimentis augeatur pituita & humidioribus vtrunque Tom.VI.

gignit : ideóque humida tutius exhibentur. Longe autem differt, calidiores gignere hu-mores, aut melius concoquere : & finiliter calorem elfe maiorem , & robuftiorem , vel ficciorem. Vnde in libello aduerfus Lycum: Pueros abundare calore naturali copiofiore ac suaniore affirmat: tum in his præstantiffimam concoctricem: Iuuenes vero non maiorem, fed ficciorem, imo minorem fubstantia, fi ad mixtionem conferatur : quo fit, vt non tam bene concoquant, ficciores tamen progignant humores : atque ideo in æftate hoc manifettius, vbi naturalis calor minor mole, maior autem qualitate , præsertim ficcitate iuncta, cernitur. Hoc autem declarabat Ga-lenus 5. de Tuenda fanitate, c. 22. in fine. Aliudeft, calorem multitudine effe maiorem, qualitate autem minorem, vt in hyeme, vne plura concoquet, ad minus tamen calidam temperiem deducet concolta, quia non vitra proprium modum, feu gradum : Aliud, quali-tate maiorem, multitudine minorem : ficque-ratione paucitatis pauciora concoquet, fed tamen ad maiorem modum caliditatis educet, Galenus tamen Aphotifinum Hippora-tis ad folum ventriculum extendit, vt ille fo-lus fit calidior. Sed fi fie,cur pluta dare cófu-lit ? Dico:Bilis abundat æftate,primo de Natura humana 36. tertia Aphorifmorum 21. & quarta Aphorifinorum 4. & fic de pituita in hyeme. Et ideo eft ficut fiquis haberet lebetem magnum plenum aqua, & multum ignem, & tempus ad coquendum breue, de-betet tamen ponete multas carnes ad co-quendum, non paucas: quia tametí multæ læ carnes non potfint perfecté coqui, tum ob paruam moram, tum ob aquam : attamen nihilo fecius fi apponeres paucas carnes pro-bè non coquerentur. Ita & fi multus cibus hyeme non perfectam alleguatur coctionem. ob frigus dandus tamen ell:quia etiam quod paucum dares, omnino non allequeretur perectam illam coctionem: imo perfæpe minus perfectam : quàm multus : quia impedimen-tum non cft à multitudine cibi, fed à frigore. Cæterùm quatuor modis qualitas qualitati comparari folet:Multitudine,quæ ad mixtionem refertur: Magnitudine, Vi, seu operatio-ne substantiæ, & Modo operandi.

CONTRADICT. III. Humor purgandus an peccet in quali, ex Aphorifm. in perturbatio-

nibus ventris.

N perturbationibus ventris , & vomitibu Iponte factis, fi qualia oportet purgati purgentur, confert, & bene ferunt : fi verò non, contrà : prima Aphor. 2. at Gal. in commento intelligit de humore qualitate sua noxio vt etiam in sequenti Aphor, at in commento Aphorsimi ciuf-dem particulæ dicentis; Deiectiones non multitudine funt æftimandæ, fed fi qua-Ce lia:



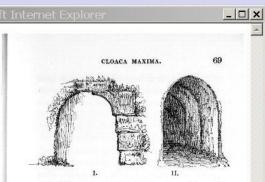
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21 Cardano 6

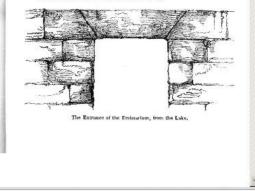
1.2 Para-textual elements:

Elements that increase and specify the information content of the text as:

- commentaries, annotations;
- interventions in the margin (like glossae);
- illuminated capital letters;
- miniatures/illustr., drawings, captions, etc.;
- critical apparatuses of variants;
- parallel passages (loci paralleli);



I. This represents the construction of the arch at that end of the Emissarium where the water is discharged into the valley. The left side of it is a perforation into the solid rock; the opposite side is constructed on the same principle as the treasury of Atreus. II. Is an internal view of the same excavation, as far as I could see into it, beyond any construction of masonry.





1.3 Properly-textual elements:

- the "linguistic" text to be understood as a succession of tokens (signifiers);
- the text intended as "metalinguistic contents", often based on graphical elements, with which it is shown on the page (size and style as italics, underlined, bold, etc.);
- and, finally, the text as semantic content expressed:
 - by linguistic units linked in sentences (meaning);
 - by translation (discussed in section n. 2: *Translation as semantic attribution*).



1.3.1 Text as a succession of tokens (signifiers)

For philological aims, it is not easy to design and develop an automatic tokenizer (parser) able to:

- recognize multi-word as a single word, when necessary;
- separate different words in a *scriptio continua* text;
- disambiguation of the value of punctuation: an uncorrected attribution can change the meaning of a sentence

Boccaccio: cheglisidonasse = che gli si donasse

«qu'elle se donnât à lui» **ch'egli si donasse** «qu'il se donnât»



1.3.2 Text as "metalinguistic contents", often based on graphical elements, with which it is shown on a printed or ms. page (size and style as italics, underlined, bold, etc.).

> निबन्धसंग्रहाख्यव्याख्यासंवलिता 205 नवपुराणयोगुणमाह--ग्रंहणीयमित्यादि । आशयाच्याति उण्णेन मधु संयुक्तं वमनेष्ववचारितम् ॥ तस्याल्पकालस्थापितलेन नवलम् . . एतद्विपर्ययेण पुराणलम् अपाकादनवस्थानाज विरध्येत प्रवेवत् ॥ १४६ ॥ 11 980 11-दोवत्रयहरं पकमाममम्लं त्रिदोवकृत् ॥ १४१ ॥

पकामयोर्गुणमाह-दोषत्रयहरमित्यादि । पकलमझिसंयो-गात, चनीभावादिखेके: 'अप्रिसंयोगनिषेधानिन्दितमेतत्, तस्मान्मधुनः कालविशेषस्थित्या परिणामात् पकलमामलं च हेयम्' इखन्ये ॥ १४१ ॥

तग्रकं विविधेयोंगेनिंहन्यादामयान् बहुन् ॥ नानाइव्यात्मकत्वाच योगवाहि परं मधु ॥ १४२ ॥

अनेककमैकारिणीं योगवाहितां दर्शयत्राह-तद्युक्तमि-स्वादि । योगैरिति औषधसमुद्दैरित्यर्थः । यादग्द्रव्येण संयो-ब्यन्ते तादृक् कम कुर्वन्तीति योगवाहिलं, तेषां मध्ये परमु-रकुष्टं मध्वित्यर्थः ॥ १४२ ॥

तचु नानाइव्यरसगुणवीर्यविपाकविरुद्धानां पु-ध्परसानां मश्चिकासंभवत्वाचानुष्णोपचारम् १४३ ॥ १४८॥ उष्णैर्विरुध्यते सर्व विषान्वयतया मधा उष्णार्तमुष्णेरुष्णे वा तन्निहन्ति यथा विषम् ॥१४४॥

> तत्सीक्रमार्याच तथेव शैत्या-ज्ञानीपधीनां रससंभवाध ॥ उष्णैविंहध्येत विशेषतस्य

तथाऽन्तरीक्षेण जलेन चापि ॥ १४५ ॥ इदानीमुक्तायामपि हिताहितीये प्रक्रमागतायामनुष्णोपचार-तायां हेतुं दर्शयनाह-तरिवत्यादि । तन्मधु अनुष्णोपचारं भवतीति संबन्धः । कस्मादिखाइ--पुष्परसानां मक्षिकासंभव-खात, किंभूतानां नानादव्यरसगुणवीर्यविपाकविरुद्धानां; 'पुष्प-रसविषमक्षिकासंभवलात्' इलान्ये पठन्तिः पुष्परसविषस-ज्ञारिण्यो मक्षिकाः पुष्परसविषमक्षिकाः । 'अनुष्णोपचारं योग-बाहि च' इति केचिइयं पठन्ति; तज्ञ, पूर्वमुक्तलायोगवाहि-तायाः । (मक्षिका हि पुष्परससंचारिष्यस्तत्संभवं मध्वपि वीर्येणोष्णं भवति, तस्मान्मधूष्णद्रव्येण नोपचर्यते युज्यते, उष्णेन सह विरुद्धलाद विषवदिति भावः ।) उष्णेन सह विरोधे हेतमाह-उष्णैरित्यादि। उष्णैरिति उष्णस्पर्शैः, न तृष्णवीर्यैः। बिषान्वयतया विषाहारमक्षिकाप्रसवतया। उष्णाते धर्मपीडि-तम । उष्णैईव्यैः सह । उष्णे देशे काले वा । उक्तमेव सुख-बोधनार्थमाह-तदिसादि । सुकुमारं ह्युष्णेन विरुष्यते; यथा नवनीतस्त्यानष्टतजलकुसुमानि । श्रीतस्यापि खभावतः शीते-मापि केनचिद्विरोधमाह-तथाऽन्तरीक्षेण जलेन चापि; खजलेन खभावतः: अपिशब्दादार्ध्यमुष्णेन सह न विरुध्यते 11 983-984 11

१ 'सविषमक्षिकासंभवत्वाच' इति पा०। २ अर्थ पाठः कचिद्धसालिखितपुसाके न पठ्यते ।

वमनविषये उष्णेनाप्यविरोधमाह-उष्णेनेत्यादि । यद्यपि वमने उष्णस्य मधुना विरोधो नोक्तः, तथाऽपि बुद्धा न

[सूत्रस्थानं

प्रयुज्जते वमनस्याधोगतिभयात् ॥ १४६ ॥ मध्वामात्परतस्त्वन्यदामं कष्टं न विद्यते ॥ विरुद्धोपक्रमत्वात्तत् सर्वं हन्ति यथा विषम् ॥१४७॥

इति मध्वर्गः । अन्यभ्योऽजीर्णभ्यः सकाशान्मध्वजीर्णं कष्टाबहमिलाह-मध्वित्यादि । मध्वामं मध्वजीर्णम् । परत ऊर्ध्वम् । आमस्य खेदोण्गोदकादय उपकमाः, ते चोण्णलान्मधनो विरुद्धाः । सर्व प्राणिनम् ॥ १४७ ॥

अथेश्चवर्गः ।

इक्षवो मधुरा मधुरविपाका गुरवः शीताः स्निग्धा बच्या वृष्या मूत्रळा रक्तपित्तप्रशमनाः क्रमिकफकराश्चेति । ते चानेकविधाः । तदाथा-

पौण्डको भीठेकश्चेव वंशकः श्वेतपोरकः ॥ कान्तारस्तापसेश्वश्च काँद्वेश्वः सचिपत्रकः ॥ १४९॥ नैपालो दीर्धपत्रश्च नीलपोरोऽथ कोशकृत ॥ इत्येता जातयः स्थौल्याद्,

अधेक्षूणां सामान्यं गुणमाह -इक्षव इत्यादि । इतिशब्दः प्रकारवाची, तेन भोरद्शतपत्रपाण्डुकवेत्रकोद्रवकचणिप्रसृतयो बह्वयो जातयो गृह्यन्ते । स्थील्यादिति स्थील्यात् सामान्यादेव द्वाद्राजातयो भवन्तीखर्थः ॥ १४८ ॥ ४९ १ ॥-

गुणान् वक्ष्याम्यतः परम् ॥ १५० ॥ सुशीतो मधुरः झिग्धो बूंहणः श्लेष्मलः सरः ॥ अविदाही गुरुर्वृष्यः पीण्ड्को भीष्कस्तथा ॥ १५१ ॥ आभ्यां तुल्यगुणः किंचित्सक्षारो वंशको मतः ॥ वंशवच्छ्वेतपोरस्तु किंचिद्रष्णः स वातहा ॥ १५२॥ कान्तारतापसाविक्ष वंशकानुगतौ मतौ ॥ पवंगुणस्तु काष्ठेश्वः स तु वातप्रकोपणः ॥ १५३ ॥ स्चीपत्रो नीलपोरी नैपालो दीर्धपत्रकः ॥ वातलाः कफपित्तझाः सकषाया विदाहिनः ॥१५४॥ कोशकारो गुरुः शीतो रक्तपित्तक्षयापदः ॥

गुणानित्यादि ॥ १५०-१५४ ॥-अतीव मधुरो मूले मध्ये मधुर एव तु ॥ १५५ ॥ अप्रेष्वश्चिषु विश्वेय इक्षुणां खबुणो रसः ॥ तेषामवयवविशेषेण गुणविशेषमाह-अतीवेलादि । अग्रे-ष्वझिषु विज्ञेय इति इक्षूणामक्षीणि पर्वसन्धिषु प्ररोहजनन-१ 'इमीरुकः' इति पा०। २ 'शतपोरकः' इति पा०।

३ 'काण्डेश्वः' इति पा० ।

a juis de reconant 1 donantiste? 2. " " prous examiner les directions contre la conception courant 3. 02 of 20 lo Schmidt p. 50. "Telles nor to riflexions for se presentencient si 4. Can D'abord contre en separement contre to premes hist. d'un V, puis 5° Leule indication p. 3. : , Es ist 5 nun Keineswegs gleichgilti, 06 3 Sman etc ... Si July un sent Daprès cela quel vincipe Caracteristique en oppose à un autre, puelle vue typ trouve cheg les sonantistes ou chez les arversaires, je consens à ce que moinsa sign por the faith of the section of the sec Wieles Lauon ne Sy (14) - fister touten menant Trompo grand bruit delen theorie, and hsla on neveral pas

June

ju'il combar



1.3.3 Text as semantic content expressed by linguistic units linked in sentences (meaning).

Lemmatization as first step for the analysis of meaning, but with some limitations as far as ancient and no more spoken languages:

- ABSOLUTUM as wordform of ABSOLVO or as wordform of ABSOLUTUM
- Hierba de San Juan as wordform of Hierba-de-San-Juan (well known case of the so-called: multiword)



Discussion about the theory of Indo-European sonants

Quotation of a specific opinion of Schmidt

a puis se reconant 1 somentiste 2. " n' prous examiner les djutions Contre la conception courante 3. 02 of rolo Schmidr p. 50. "Telles nor to riflexion for te presenteraint & 4. Card d'abord contre et separement contre tos preuves hist. d'un V, puis d'un n pue se tourne . de partie du y reste D'les ten. post indon 5° Leule indication p. 3. :, Es ist s nun Keineswegs gleichgilti), 06 man etc ... Si quelqu'un sent Daprès cela quel principe caractéristique en opposé a un autre, puelle vue typique on trouve cheg les sonantistes on les arversaires, je consens à ha remargue Soit fause. moins a stip par by pic the a raiton du) tists, Touten menant Troupe grand bruck o Theore, avai hsla usedain



1. Primary sources, metadata, standard Conclusions of this section 1/2

- There is no single criterion by which a digital object can be defined with unique and always valid descriptive metadata, since the description depends on the subject that "interprets" and ontologically "classifies" it.
- The classification of a digital object is, accordingly, an iterative process that accumulates metadata of different types depending: - on the point of observation; - the context in which the object is inserted; - and the competence or of the purposes of the observing subject.

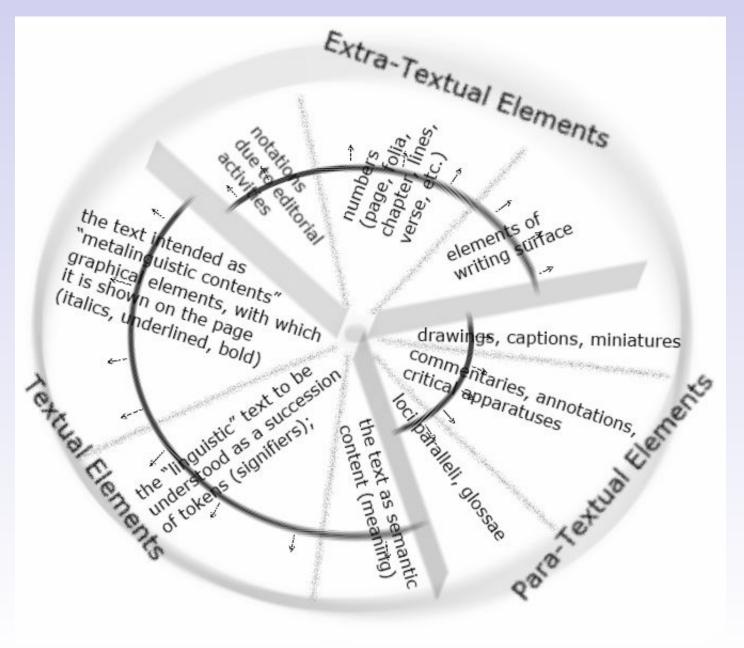


1. Primary sources, metadata, standard Conclusions of this section 2/2

- The collaborative aspect of the Web makes it possible (but not mandatory) this collection of metadata and it represents a powerful tool for enrichment of digital objects and their use by various types of users
- In a new way of teaching and training, students must be an integral part of this process of classification and assignment of descriptive metadata: "learning by doing"



Incremental nature of the descriptive metadata



Metadata attribution to a digital object: it becomes a source enriched by information increasing its value

- Metadata are divided into sections: extra-textual, paratextual and textual metadata.

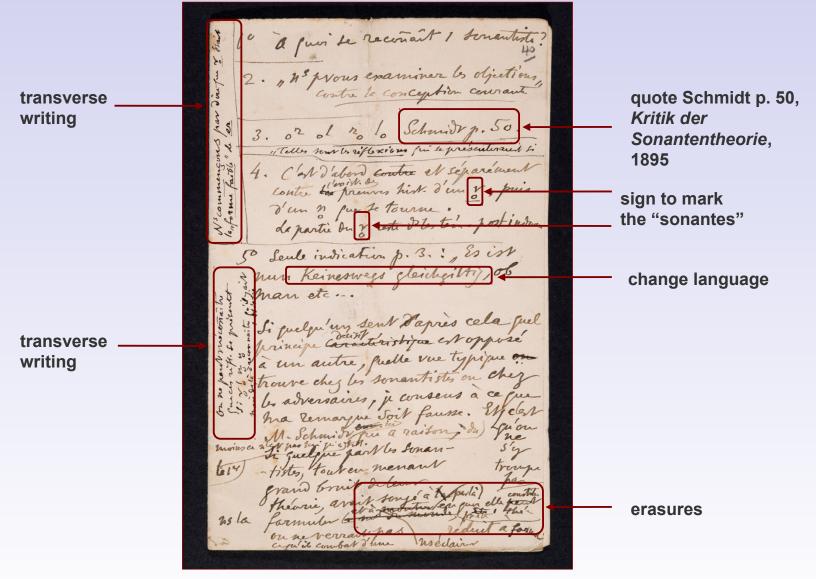
- Each section contains as many sub-sections as those found and murked-up by each single scholar in the analyzed text

- The upper edge of the sections is undefined: it is highly unlikely that a digital object is described in "all" its components.

- The portions (= different types of metadata) can be selectively chosen so that the application that browses the data could be able to satisfy the queries by different types of users (eg, users, experts, learners, general users).



Ferdinand de Saussure, Théorie des sonantes, Ms. BPU Ms. fr. 3955/1 [40r]



Sanscrit Latin Grec Al	llemand	Français	Terme Reconstruit	Recherche Composite			
	Word In	ndex			SEARCH GREEK		
		(1 of 1)	» 10 •	Word A	Word B	Word C	
		τετα		form	form	form	
	Q	τεταγμένοι	2	τετάχαται	×	×	
	9	τεταχηται	2	Every Status 🔻	Every Status 🔻	Every Status 🔻	
	🔍 τετάχαται			Operator:	OR 🔹		
		(1 of 1)	> 10 -	Search	Save parameters	Clear Parameters	

results

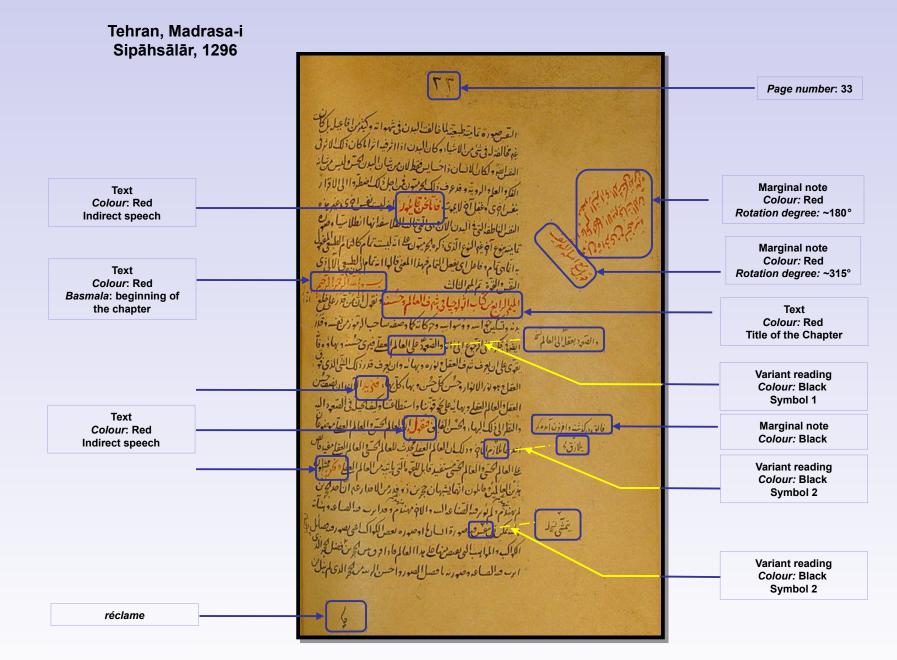
• <u>132r</u>

(1) M. Schmidt dit que nul n'aurait jamais été tenté par une conception aussi extravagante que les nasales sonantes, si cette conception n'était visiblement inspirée par la hantise spéciale qu'exerce su l'esprit des linguistes l'existence de ren sanscrit (p. 00). J'affirme que la toute première fois qu'en traduisant Hérodote la forme grecque τετάχαται me tomba sous les yeux (ne connaissant jusque-là que l'attique τεταγμένοι είσι) – donc à l'école, et bien loin de rien connaître du r sanscrit – , je me suis expliqué cette forme comme ne pouvant valoir que τεταχηται, en m'appliquant à prononcer ce groupe et en constatant aussitôt qu'il pouvait très bien se prononcer. Plus tard je m'expliquai de même τατός. (La seule raison pour laquelle je ne fis point part de cette remarque est que je ne me pouvais naturellement soupçonner comme écolier qu'il eu la moindre importance en linguistique, et que lorsque je pus me rendre compte de son importance, M. Brugmann venait d'émettre la même idée). – Comme autre preuve qu'il n'est pas besoin de connaître le r sanscrit pour être poussé à voir un n dans une foule d'a grecs, je citerai le travail de [] dans le [] vol. des Philological Transactions (186?) où toutes les formes comme [] sont également expliquées dès cette époque par un helléniste classique comme valant noδv, επτν, [] avec n syllabique.

• <u>7r</u>

La conception de la nasale voyelle, pense M. Schmidt, n'aurait pas même fermé l'esprit de quelqu'un sans la spéciale hantise qu'exerce sur l'intelligence de nos linguistes la classification du r comme voyelle chez les Hindous (p. []). Me sera-t-il il permis d'affirmer que la toute première fois qu'il m'est arrivé personnellement, par le texte d'Hérodote, de voir la forme reriàvarai (ne connaissant jusqu'alors que l'attique τεταγμένοι εισί) – donc sur les bancs de l'école et loin de rien connaître du r sanscrit –, je m'expliquai à moi même cette forme comme valant τεταχηται, en essayant de prononcer, et en décernant à ma surprise qu'il n'y avait point de difficulté à prononcer.Frappé de cette circonstance, je m'expliquai plus tard de la même façon τατός, mais seulement je le reconnais vis-à-vis de M. Schmidt, après m'être procuré une grammaire sanscrite, et avoir eu connaissance par

Spécialisation du système de philologie computationelle pour le projet PRIN2008: "Pour une édition numérique des manuscrits de F. de Saussure"





How G&A WebApp manages the two texts in form of parallel pericopes

Εἰ δέ ἐστιν ἀθάνατος ἕκαστος ἡμῶν, ἡ φθείρεται¶ πᾶς,

ή τὰ μὲν αὐτοῦ ἄπεισιν εἰς σκέδασιν καὶ φθοράν, τὰ¶ δὲ μένει εἰς ἀεί, ἄπερ ἐστὶν αὐτός,

ώδ' ἄν τις μάθοι κατὰ¶ φύσιν ἐπισκοπούμενος.

'Απλοῦν μὲν δή τι οὐκ ἂν εἰη¶ ἄνθρωπος, ἀλλ' ἔστιν ἐν αὐτῷ ψυχή, ἔχει δὲ καὶ σῶμα

είτ' οὖν ὄργανον ὂν ἡμῖν, εἴτ' οὖν ἑτερον τρόπον προσ-¶ηρτημένον.

'Αλλ' οὖν διῃρήσθω τε ταύτῃ

καὶ ἑκατέρου¶ τὴν φύσιν τε καὶ οὐσίαν καταθεατέον.

Τὸ μὲν δὴ σῶμα¶ καὶ αὐτὸ συγκείμενον

οὕτε παρὰ τοῦ λόγου δύναται¶ μένειν,

ή τε αίσθησις ὁρῷ λυόμενόν τε καὶ τηκόμενον¶ καὶ παντοίους ἀλέθρους δεχόμενον,

ἐκάστου τε τῶν¶ ἐνόντων πρὸς τὸ αὐτοῦ φερομένου, φθείροντός τε ἄλλου¶ ἔτερον καὶ μεταβάλλοντος εἰς ἄλλο καὶ ἀπολλύντος, καὶ μάλιστα ὅταν ψυχὴ ἡ φίλα ποιοῦσα μὴ παρῇ τοῖς¶ ὄγκοις.

Καν μονωθή δε έκαστον γενόμενον εν, ούκ έστι,

λύσιν δεχόμενον εἴς τε μορφὴν καὶ ὕλην,ἐξ ὧν ἀνάγκη καὶ τὰ ἀπλᾶ τῶν σωμάτων τὰς συστάσεις ἔχειν. إنا نريد أن نعام هل الإنسان بأسره كله واقع ّ تحت الفساد والفناء؟ أم بحضه يبيد ويفنى ويفسد وبحضه يبقى ويدوم؟ وهذا البحض: هو ما هو؟ فمن أر اد أن يعام ذلك عاماً صحيحاً فليفحص فحصاً طبيعياً كما نحن واصفون. فنقول: إن الإنسان ليس هو شيئاً مبسوطاً ساذجاً، لكله مركحياً من نفس وجسم؛ والنفس عير الجسم. والجسم إما أن يكون بمنزلة آلة النفس، وإما أن يكون متصلا بها بنوع آخر من الأنواع. غير أنه بأي نوع الاتصال كان، فإنه ينقسم الإنسان بقسمين وهما نفس وجسم. ولكل واحد من هذين القسمين طبيعة غير طبيعة الآخر، والجسم مركب غير مبسوط،

فالجسم إذن يتفرق وينحلُّ ولا يبقى.

وقد يشهد العيان بذلك،

وذلك لأن البصر يرى كيف يذبل وينحل ويفسد بأنواع كثيرة من الفساد.

ويرى كيف يُفسد بعض الأجسام بعضا، وكيف يستحيل بعضها إلى بعض، وكيف يتغير بعضها إلى بعض،

ولا سيما إذا لم تكن النفس الشريفة الكريمة الحية موجودةً فيها، أعني في الأجسام.

Part of speech automatic attribution

Eiderindervernigaroroguwindelgerenas

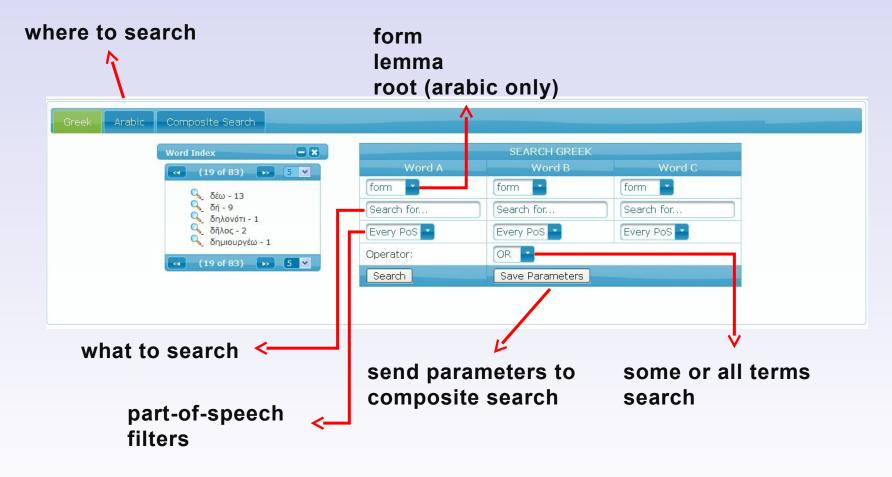
ٳؾٵۯڿٵ۬ۮۼڮڟڸٵ؆ڛٛٳڶۅڸۼڗۊڮۊڲۊڲۜۊڲ

form	Lemma	POS
	εἰ	Conjuction
	δέ	Particle
	εἰμί	Verb
	ἀθάνατος	Adjective
	ἕκαστος	Pronoun
	ήμεῖς	Pronoun
	ή	Conjunction
	φθείοω	Verb
	πᾶς	Pronoun

form	Lemma	Root	POS	voc
	إِنَّ نَا	أنن	Particle + Pronoun	ٳڹۜٳ
	أرَادَ	ريد	Verb	ڹۘڔيۮؗ
	أن	أنن	Particle	ٱن
	عَلِمَ	علم	Verb	ڹؘٵ۠ڵؘؘڡ
	ەَلْ	ەل	Particle	ەَلْ
	اَلْ إِنْسَان	أنس	Particle + Noun	الْإِنْ سَانُ
	بِ أَسْرِ هُ	أسر	Prep. + Noun + Pronoun	بِأَسْر هِ
	ڮ۠ڵ	كلل	Noun + Pronoun	ڮؗڵؚۣۜ؋
	وَقَعَ	وقع	Active Participle	وَاقِعٌ
	ؾؘحْتَ	25 تحت	Adverb	ؾؘحۛؾؘ

Full-text search

• Base and advanced search functions:





Contents of my speech

- Relationship between primary sources and secondary sources (= sources annotaded by different kind of information)
- Translation of primary sources, which in our model can be considered as a particular form of secondary information
- Digital scholarly editing with COPhi: production of critical editions of digital documents, from ancient to modern ones, especially those transmitted on manuscripts



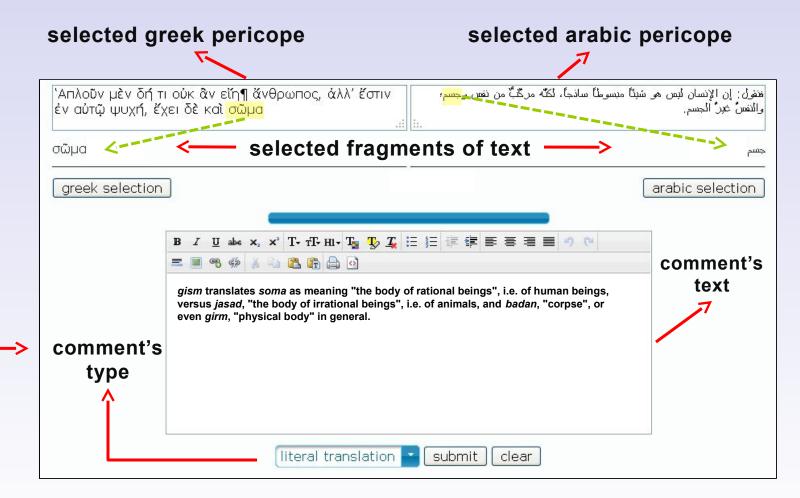
2. Translation as semantic attribution

Info Greco	Pericope Greca	Pericope Araba	Info Arabo
		فنريد الأن أن نذكر العلة التي لها وقعت الأسامي المختلفة على النفس ولزمها ما يلزم الشيء المتجزئ المنقسم بالذات.	Maymar 2 38 [13-14]
IV 3 [27] 19.1-5	Πότερα δὲ ἐπὶ τοῦ αὐτοῦ τὸ ἀμέριστον καὶ ¶ μεριστὸν ὥσπερ κραθέντων, ἢ ἄλλῃ μὲν καὶ κατ' ἄλλο ¶ τὸ ἀμέριστον, τὸ δὲ μεριστὸν οἶον ἐφεξῆς καὶ ἕτερον ¶ μέρος αὐτῆς, ὥσπερ τὸ μὲν λογιζόμενόν φαμεν ἄλλο, ¶ τὸ δὲ ἅλογον;	فينبغي أن يُعلم: هل تتجزأ النفس؟ أم لا تتجزأ؟	Maymar 2 [38.14]
		فإن كانت تتجزأ فهل تتجزأ بذاتها، أم بعرض؟ وكذلك إذا كانت لا تتجزأ فبذاتها لا تتجزأ، أم بعرض؟	Maymar 2 38 [15-16]
		فنقول إن النفس تتجزأ بعرض، وذلك أنها إذا كانت في الجسم قبلت التجزئة بتجزؤ الجسم،	Maymar 2 38 [16-17]
IV 3 [27] 19.4-5	ὥσπερ τὸ μὲν λογιζόμενόν φαμεν ἄλλο, ¶ τὸ δὲ ἄλογον	كقولك إن الجزء المتفكر هو غير الجزء البهيمي	Maymar 2 38 [17] - 39 [1]
		وجزؤها الشهواني غير الجزء الغضبي.	Maymar 2 39 [1]
		وإنما نعني بالجزء منها جزء الجسم الذي تكون فيه قوة النفس المفكرة، والجزء الذي فيه قوة الشهوة، والجزء الذي تكون فيه قوة الغضب.	Maymar 2 39 [1-3]
		فالنفس إنما تقبل التجزئة بعرض لا بذاتها، أي بتجزؤ الجسم الذي فيه، فأما هي بعينها فلا تقبل التجزئة البتة.	Maymar 2 39 [3-4]
IV 3 [27] 19.6	Αμέριστον μὲν οὖν ἁπλῶς εἴρηται αὐτῷ	فإذا قلنا إن النفس لا تتجز أ فإنما نقول ذلك بقول مرسل ذاتي؛	Maymar 2 39 [4-5]
IV 3 [27] 19.7	μεριστὸν δὲ οὐχ ἁπλῶς	وإذا قلنا إن النفس تقبل التجزئة فإنما نقول ذلك بقول مضاف عرضيٍّ،	Maymar 2 39 [5-6]
IV 3 [27] 19.7-8	άλλὰ περὶ τὰ σώματά φησι ¶ γινομένην μεριστὴν καὶ ταύτην οὐ γεγενημένην	لأنها إنما تكون متجزئة إذا هي صارت في الأجسام.	Maymar 2 39 [6]
IV 3 [27] 19.8-9	Τὴν ¶ δὴ σώματος φύσιν ὁρᾶν δεῖ πρὸς τὸ ζῆν οἵας ψυχῆς ¶ προσδεῖται	وذلك أنا إذا رأينا طبيعة الأجسام تحتاج إلى النفس لتكون حية حساسة	Maymar 2 39 [7]
IV 3 [27] 19.8-9	καὶ ὅ τι δεῖ τῆς ψυχῆς πανταχοῦ τῷ σώματι ¶ καὶ ὅλῷ παρεῖναι	والجسم يحتاج إلى النفس لتكون منبثة في جميع أجزائه؛	Maymar 2 39 [7-8]
		قلنا إن النفس متجزئة، وإنما نعني بذلك أنها في كل جزء من أجزاء الجسم لأنها تتجزأ بتجزؤ الجسم.	Maymar 2 39 [8-9]
		والدليل على أن ذلك كذلك أعضاء البدن، وذلك أن كل عضو من أعضاء البدن إنما	NC 0.00 [0.11]



2. Translation as semantic attribution

• The system allow to add notes (free or classified) to the whole pericope or to a part of it:



2. Translation as semantic attribution

♠ 🖯 🌣					Sistema Talm	ud		? 🔨 🔻 Alessia Bellusci	
ndice	originale in ebraico ديانچە: "ارىچىنى ئېچچا، زىلېژىچى:	וראינגא	ואינטי	×				Risorse correlate	
▼ 1. Berakhot	אַמָּר רָבָא: תֵּדַע, דְּלָא מְסָוּוּ לֵיה לְאֲיָרָשׁ לָא אַמַר רָבָא: תֵּדַע, דְּלָא מְסָוּוּ לֵיה לְאֵינָשׁ לָא דְקָלָא דְּדָהַבָּא, וְלָא פּילֵא דְּעֵיל בְּקוֹפָא			^	14 <4 1 >>	▶ 25 ▼		▼ Note	
 1. Capitolo 1 2. Capitolo 2 3. Capitolo 3 		רְּמָּחַטָּא. דְּמַחַטָּא.		3	.13. Il controllo del contenuto dei s	ogni rlichtner2		Nessuna nota inserita.	
 4. Capitolo 2 4. Capitolo 4 5. Capitolo 5 			56a		.13.1. La domanda dell'imperatore	rlichtner2		▼ Glossari	
 ▶ 6. Capitolo E ▶ 7. Capitolo 7 	ר לְרַבִּי יְהוֹשֶׁעַ בְּרַבִּי חַנַגָיָא: מִיתוּ טוּבָא, אֵימָא לִי מֵאי חָזֵינָא ר לִיה: חָזֵית דַּמְשָׁחַרִי לֶךְ פַּרְסָאֵי	τι τηςς	אָמְרִיר		אַמַר לֵיה קַיסָר לְרָבִי יְהוֹשָׁעַ בְּרָבִי חַנַתֶּי	Disse l'imperatore di Roma a rabbi Yehoshuah, figlio di rabbi Chaninah:		Nessun riferimento ai glossari.	
▶ 8. Capitolo 8 ▼ 9. Capitolo 9	ַיֵּי בָּךְ שֵׁקְצֵי בָּחוּטָרָא דְּדַהָבָא. יֵי בָּרְ שֵׁקְצֵי בָּחוּטָרָא דְּדַהָבָא.				ָאָמָרִיתוּ דְּחָכְמִיתוּ טוּבָא, Voi dite di essere molto saggi,	1	אָמְרִיתוּ דְּחָרָמִיתוּ טוּבָ rlichtner2		
🕨 1. Mishnê	וֹמָא, וּלְאוֹרְתָא חֵזָא. אֲמַר <u>לֵ</u> יה	פּוּלֵיה י	הַרְהֵר		אַימָא לִי מַאי חָזֵינָא בְחַלְמַאי!	allora dimmi cosa vedrò nel mio sogno!		Voi dite di essere molto saggi,	
🕨 3. Berakh	 4. I luoghi עַזְעָלוּ עָטָרָעָ וּשָׁבוּ לַרָה, וְטַחֵנִי בָּהְ קָשָׁייָתָא 5. Chi dev בְּחַשָּׁיוֹת דָאָתוּ רוֹמָאַי וְשָׁבוּ לָה, וְטַחֵנִי בַּהְ קָשָׁייָתָא 6. La ben 7. Altre lis 8. Pratich בַּרַ הַדָּיָא מְפַשֵּׁר חֶלְמֵי הַוָה, מֵאן דָיָהֵיב לֵיה אַגְרָא – מְפַשַּׁר לֵיה לְמַעַלוּיוֹתָא, וּמַאון דָלָא יָהֵיב 9. Cose p 10. Sulla 				3.13.2. La risposta di rabbi Yehoshuah rlichtner2			voi ane ai essere mono saggi, דְׁהָוּוּ קֵבְּדְהִי טוּבָא, jdiseg	
▶ 5. Chi dev				אַמַר לֵיה: בְּרָחָיָיא Gli disse: סַזַית דְּמְשָׁחָרִי לָה פַּרָסָאֵי וְגַרְבִי בָּהָ מַזֵית דְּמְשָׁחָרִי לָה פַּרָסָאֵי וְגַרְבִי בָּהָ וּמַזִית דְמָשָׁחָרִי לָה פַּרָסָאֵי וְגַרְבִי בָּהָ		Gli disse:		si rallegravano troppo	
▶ 6. La ben ▶ 7. Altre lis ▶ 8. Pratich						tu vedrai che i Persiani ti obbligheranno ai lavori forzati e ti deprederanno,	ī	אָאָ אָאָאָ דָהָווּ קַבָּדְחִי טוּבָּא, jdisegni si rallegravano troppo.	
▶ 9. Cose p ▶ 10. Sulla ▶ 11. Altri ir					e ti faranno pascolare gli animali con un אורעיי בָּרְשָׁקְצֵי בְּחוּטְרָא דְדַהָבָא. מַיָּה אַהָּ הָרָעיי בָּרָשָׁקְצֵי בְחוּטְרָא דְדַהָבָא. מַזוּ הָזָ bastone d'oro.		ш	 ✓ Versioni precedenti 	
► 12. Discu ▼ 13. II con	ז: אַקְרִינַן בְּחֶלְמִין ״שׁוֹרָך טָבוּחַ	לֵיה. אָמְרִי לֵיה: אַקָּרִינן בְּחֶלְמִין ״שׁוֹ לְעֵינִירְ״ וּגוי. לְרָבָא אַמַר לֵיה: פָּסֵיד						Nessuna versione precedente disponibile.	
▶ 1. La d ▶ 2. La ri	אַכּנּי לָךְ לְמֵיכָל מֵעוּצְּבָא דְלָבָּךָ, לָאַבַּיֵי אָמָר אַהַנִי לָךְ לְמֵיכַל מֵעוּצְבָא דְלָבָּךָ, לָאַבַּיֵי אָמָר לֵיה: מַרְווח עָסְקָרָ, וְלָא אַהַנֵי לָךְ לְמֵיכַל מֵתָדָוָא			הָרָהֵר כּוּלֵיה יוֹמָא, L'impera		L'imperatore ci pensò tutto il giorno,			
▶ 3. Il so	manda di Shapur	7-7 I II 71		70	וּלְאוֹרָתָּא מְזָא.	e poi di notte vide ciò in sogno.			
5. La Ris	sposta di Shmuel	0	Ja	1.9	.13.4. La domanda di Shapur	alessia			
 2. Shabbàt 5. Rosh Hashana 	a	1	55b		אַמַר לֵיהּ שָׁבוֹר מַלְכָּא לְשָׁמוּאֵל:	Disse il re Shapur a Shmuel:			
▶ 6. Yoma ▶ 19. Qiddushìn		2	55b		אָמְרִיתוּ דְּחָכְמִיתוּ טוּבָא,	Voi dite di essere molto saggi,			
21. Bavà Metzi'à		3	55b		אַימָא לִי מַאי חָזֵינָא בְּחָלְמַאי	allora dimmi cosa vedrò nel mio sogno!			
(0	J a	1.9	1.13.5. La Risposta di Shmuel	alessia			
		1	55b		אַמַר לֵיהּ:	Gli disse:			
		2	55b		(stringa originale vuota)	(traduzione non inserita)			
					14 × 1 >>	≥ 25 ▼	ļ		
	*	💼 Bi	imina	- 0	Copia 🕒 Incolla 🕒 Unisci	▼ Esporta 🕞 Genera 🚯 Nuova stringa 🗣			